INDUSTRIAL DEMOCRACY

A PLAN FOR ITS ACHIEVEMENT

BY

GLENN E. PLUMB

AND

WILLIAM G. ROYLANCE

NEW YORK B. W. HUEBSCH, INC. MCMXXIII

PRINTED IN U. S. A.

TO ALL WHO TOIL
THIS BOOK IS DEDICATED
AS AN APPRECIATION
AND A METHOD OF EMANCIPATION.

THIS book is the consummation of many years of practical experience and profound study by our late friend and associate, Mr. Glenn E. Plumb; it is his final contribution toward securing that social justice our government was created to establish. The truths set forth in this work are as ancient as human experience; their application is new only as development in the material arts and sciences makes new institutional adjustments necessary in the economic and social relations of organized society. As advocates of social justice are only to be secured through economic and industrial justice, we can render no more valid service to our times than by the widest diffusion of these truths in which we believe.

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FOREWORD

For those who had the privilege of personal acquaintance with Glenn E. Plumb, or for those who have heard him present his ideas from the platform, no formal preface to this book is necessary. The book is an elaboration of the theory of industrial organization developed by Mr. Plumb, originally with reference to a specific industry; and an extension of the programme to embrace general industry. It offers a solution for those imperative questions that haunt the statecraft of all nations. It is fortunate that he was able to enlist the coöperation, as co-author, of Mr. W. G. Roylance, whose special qualifications and sympathetic opinions he had recognized and which are demonstrated throughout this volume. Mr. Plumb had the accumulated notes of years of study covering every phase of the subject. The text was in a finished state at the time of Mr. Plumb's death. The form and content of the book, arrangement of material and general philosophy resulted from earnest collaboration. The known familiarity of Mr. Roylance with the problems of agriculture, public finance, banking, currency, credit and their relation to industrialism give authentic value to their treatment.

As the book discusses fundamentals of democracy as related to the object of government and the production and distribution of wealth as a social necessity, it is appropriate that democracy be defined.

The general definitions of democracy in colloquial use are unsuited to a treatise intended to develop a concrete programme of industrial reconstruction which will give

effect to ideas of democracy that traditional conceptions of democracy have failed to realize. Heretofore, definitions of democracy have been limited to a purely political concept of social organization; and for the reason that there has never existed any other than a politically organized state. The monotonous repetend of failure to realize the primary objects of social organization, under purely political forms, enforces a consideration of alternatives and the development of a theory of social organization that will reinforce the admitted weakness of our existing system by automatic processes.

It is widely understood that the production and conservation of wealth is a primary motive of all social order; and that, almost without exception, the institutions of organized society originate and have their being as they tend to promote these ends. It is also understood that the creation of wealth is an industrial and not a political function. Political intermeddling with industrial functions, as though politics had been designed for that purpose, controls the distribution of wealth; but neither wealth nor good morals can be created by any exercise of political power. Any form of industrial organization, however, is an expression of a still deeper understanding: that it is the economic concept of democracy that is the foundation of all society.

Jefferson's definition of democracy: "equal rights for all and special privileges to none," served its purpose well at a time when opportunity was relatively free. But as monopoly developed and opportunity grew scarce, the distinctions between "rights" and "privileges" became obscured and outlawed, and "rights" demanded definition.

Lincoln, in the immortal Gettysburg Address, brought Jefferson's definition up to his time, and formulated

most popular definition extant: "A government of the people, by the people and for the people." While still somewhat abstract, Lincoln's definition is broad enough to cover the political, economic and industrial phases of the philosophy of democracy. Expressed in terms of political theory, it would read: democracy is a system of social organization under which the sovereignty of the people is vested in the body of the State and exercised through agencies chosen by the people.

If we could consider the system of representative democracy, thus established, as faithfully representative, and as expressing a policy of economic democracy, Lincoln's definition might be stated: democracy is a theory of social order wherein the public policy of the State is determined by and its public affairs are administered for the common good.

An industrial democracy, to give effect to the policy of an economic democracy, is: A system for the production and distribution of wealth that will insure equality of opportunity to all and guarantee to each the full enjoyment of the fruits of his industry, by a share in the sum total of all production proportioned to his contribution thereto.

A vain search for even the briefest period in which a purely political democracy has not in effect misrepresented actual public opinion, makes it evident that, if democracy in any form is to survive, measures are necessary that will establish a vital unity of public policy and its official expression.

A drift toward the "right," that is, toward a narrower representation, and an assumption of larger powers by official exponents of public policy, has always been the unfailing presage of the extinction of democracy, political, economic and industrial. The measures obviously indicated are such as will impart a widening of representation with a narrowing

of powers assumed by agencies chosen by the people. This can be accomplished only by enlarging the direct participation in the policy and proceeds of industry by all those engaged in industry, in a way that will develop an economically equitable system for the production and distribution of wealth; an economic democracy, of which political democracy has always been the deceptive shadow.

First-hand contact with many important industries, intimate understanding of political and juridical institutions and processes, and a deep study of historic industrialism led Mr. Plumb to a conviction that social phenomena display uniformities that have the force of natural laws, in obedience to which social evolution proceeds; that the fulcrum of these laws is found in economics; and that industrial democracy must be the instrument for the attainment of those purposes for which our government was formed. To show the way this may be done is the purpose of this book.

Mr. Plumb gave the last full measure of devotion to the cause he carried in his heart. He literally gave his life for the attainment of a larger life for millions who trusted him and loved him as few men are ever loved and trusted. Mr. Plumb held a firm belief that the evolutionary progress of civilization and the processes of social moralization are accomplished, not by volcanic social convulsions, but by the constant working and ultimate convergence of infinite small forces; that the processes of social development approximate in method those processes continually in action in the physical universe. He believed that with sufficient understanding of the elements and forces that underlie the processes of social evolution, it is possible to enlist a conscious rational intervention that may transform the succession of social phenomena from an apparent cascade of accidents

to an orderly succession of advances, toward the fulfilment of an intelligent purpose.

WESTERN STARR.

Washington D. C.

INDUSTRIAL DEMOCRACY

I

THE COLLAPSE OF AUTOCRACY

AFTER four years of futile attempts at economic and political reconstruction following the world war, modern civilization finds itself in a more difficult and dangerous situation than existed either at its beginning or at its close. The causes of the conflict have not been removed; injustice, oppression and inefficiency of leadership still exist, and have been in many ways aggravated. During these years following the war, many attempts to reëstablish industry on the old autocratic basis have been made, but economic conditions in most countries are worse than when hostilities ceased. International relations are in a state of dangerous uncertainty; in most of the countries of Europe, political, social and industrial unrest threatens at any time to break into active revolution; Asia and Russia are ever-present menaces to the ineffective and unstable peace negotiated by the European Powers. Germany, if compelled to pay in full the reparations prescribed by her conquerors, will be financially and economically bankrupt; and France is financially bankrupt unless Germany pays in full. The empire of Great Britain, based upon a domination of world commerce and finance that endured for a hundred years, but was ended by the war, is crumbling; and her internal industrial and economic condition is only less hopeless than that of the Continental nations. Even the United States, whose

material gains from the war were considerable, is facing the collapse of its industrial and financial system, unless there soon appear a leadership capable of providing a constructive policy that will prevent the recurrence of such disastrous periods of industrial stagnation as the present, by eliminating the exploitation of its industries and releasing its productive energies.

At the end of 1918, we were greatly concerned in this country with the problem of how to repair the economic losses of the war. There was much talk of industrial reconstruction; talk which was at first forward-looking and hopeful, but which soon settled down into a passive acceptance of the proposition that we should return as soon as possible to the "normal" conditions that were supposed to have existed before the war. But no constructive policy has been adopted, either for going ahead or for returning to "normal." We allowed ourselves to drift into an industrial situation compared with which the years of the war were a time of exceptional prosperity. We are talking more or less hopefully of an early industrial recovery, not from the ravages of war, but from the effects of the failure of reconstruction. Our losses due to the years of economic maladjustment following the war will aggregate nearly three times our total war losses, and recovery is taking place under conditions that promise only partial and temporary prosperity, that will perpetuate and intensify existing injustices; and that will render it impossible to repair the enormous losses due to the failure of post-war reconstruction, or to pay our war debt, without imposing oppressive burdens upon the people.

In the Old World a like state of mind has existed with regard to post-war industrial and economic problems, and similar, but far more hopeless economic conditions have developed. Since the war, Europe has been drifting into

economic chaos. There, as in this country, the economic condition at the end of the war was far more hopeful than the prospect that now menaces the people after these years of financial bargaining, diplomatic trickery and the chicanery of politicians who have vainly attempted to establish peace on a basis of compromise among the exploiters of industry, instead of upon a basis of mutual economic justice and industrial welfare. Many of the peoples of Europe have come to look back upon the war as a sort of golden age of industrial prosperity. There, as in this country, it is recognized that the material losses due to the failure of economic policy during the period of "reconstruction" are greater than the total material losses of the war; and that the toll in human suffering and human lives taken by poverty, famine and pestilence in Europe, due to the economic maladjustment of the post-war years is many times greater than that taken by the war.

But Europe is not looking forward to economic recovery. There, all prophecies are gloomy; all predictions hopeless. It is assumed that no readjustment is possible that does not include Russia; and at the same time it is recognized that the economic system recently established in that country is utterly irreconcilable with that which dominates the rest of Europe. France is depending upon the payment of reparations by Germany, upon conquest and upon commercial exploitation, rather than upon her own resources. For England, the recovery of industrial prosperity seems impossible without the recovery of her former dominant position in foreign trade; and all indications point to an international trade warfare more bitter, uncompromising and destructive than any the world has yet known, and one that will be waged under conditions that will make it impossible for England to recover her former dominant position.

Meanwhile, the industrial and financial autocracies that

dominated Europe before the war, and whose internal quarrels were largely responsible for involving the world in that conflict, while making unavoidable concessions to democracy in order to set industry in motion again, are making desperate attempts to regain their power. It is evident that political and industrial democracy are being systematically sabotaged in Germany. Though at first favorably disposed toward a liberal industrial policy at the close of the war, those who have the shaping of England's political and industrial policies have more recently shown a strong disposition to make common cause with the interests that exploited the industries of the English people before the war, and whose failure in constructive leadership brought that country so near the brink of disaster while the war was in progress. Conditions are similar in every other important European country. The real or pretended menace of communism is made the excuse for the restoration of autocratic power, both in government and in industry. Yet autocracy is utterly discredited, both among its supporters and its opponents. No one expects from its restoration more than a temporary peace and an appearance of industrial prosperity, won at the cost of mortgaging the lives, the liberties and the labor of the people to the autocrats for generations to come.

But the greatest menace to the peace and prosperity of the world is not found in any internal development of the economic or political lives of the people. Industrial, financial and political policies are shaped by investment interests, controlled by bankers, speculators and financial *entrepreneurs*. In so far as these interests are able to agree among themselves, they pursue their ends regardless of national divisions. Neither internal nor international questions can be decided without their consent, and yet they have no common policy for the rehabilitation of European industry

and commerce. These interests hold a debt against the industries of the world that can never be paid, unless industry can be reorganized so as to release all productive energy for full production. The financial interests can not provide such an organization. They can not release industry without abdicating their powers; and thus far, it appears that they would rather have the mere shadow of power that comes from the ability to enforce obligations, the payment of which will cause certain economic ruin, than the real and tangible benefits that would accrue from the release of industry and the payment of the debt in full.

The principal of the existing world debt can never be paid out of the highest possible production under the existing industrial system. If the debt should continue to increase at the present ratio, or even at the pre-war rate of increase, the time is not far distant when not even the annual interest can be paid. Therefore, the establishment of an autocratic control of industry, through the control of the world debt, is impossible without causing the utter ruin of industry.

There is no mystery about this situation. It is merely a matter of simple arithmetic to show that the burden can not be carried. The total public and private debts of civilized countries probably amount to more than two thousand billion dollars. Their total net annual production can hardly exceed five hundred billion dollars. The annual interest on the total debt, at five per cent., is more than a hundred billion dollars. The total annual interest charge upon production, in excess of interest on the funded debt, is probably not less than twenty billion dollars. So that the aggregate annual interest charge on a production of five hundred billions is one hundred and twenty billion dollars, or one-fifth of net annual production.

These estimates are made in terms of the value of the

dollar in 1920. But the funded debt of the world is made payable in gold. There is less than nine billion dollars of gold money in the world, and the greater part of this is in the hands of those who hold the debts that must be paid in gold. There are just two ways in which, conceivably, nations, associations or individuals owing these debts can get the gold in which to pay them: by producing goods to exchange for it, or by borrowing it from those who hold both the debt and the gold in which it is to be paid. The first is a practical impossibility. In the first place, those to whom the debt is due have no use for more than a small fraction of the goods that would have to be exchanged, unless they sell them again; and there is no one to sell them to, except those who owe the debt; and they can not buy because it takes more than their entire surplus to pay their debts. It would require nearly fourteen times all the money gold in the world to pay a single year's interest on the total public and private debt that is payable in gold.

This is clearly an impossibility. It is recognized as such by those who hold the world debt. They neither expect that payment will ultimately be made in gold, nor will they undertake to supply gold credit for its payment. They do not expect it to be paid in goods. What they apparently do expect is that the debt will finally be funded in some new form of promises to pay the principal in gold, and that the interest also will be paid in such promises. The result will be that the annual interest accumulation will be added to the existing debt. Five minutes study of a compound interest table will be sufficient to show the utter absurdity of the supposition that the debt will ever be paid under such conditions.

Meanwhile, all the greater and more profitable productive industries of the world are monopolized by industrial corporations that are directly or indirectly affiliated with

the gigantic financial interests that control the world debt. These are largely the key industries, upon which the conduct of all other industries depends; and the interests that control them are able to exact profits so large that there is every year an accumulation of billions in excess of capital needs, plus the consumptive requirements of those who receive the profits. This surplus must find investment, and it is therefore added to the existing debt. In normal years, this so-called "capital" accumulation is not less than ten billions in this country alone, and in all civilized countries—if in an equal ratio to net production—would be over eighty billion dollars. Compounded at five per cent., this debt accumulation would amount to three thousand billion dollars in twenty-one years; and the annual interest on it at five per cent. would be one hundred and fifty billion dollars, or thirty per cent. of net annual production. Adding this to the estimated present interest charge, we find that at the end of twenty-one years the industry of the world would be required to pay every year two hundred and seventy billion dollars as interest on its debt, which is more than one-half of net annual production; and it would require more than thirty times the total of all the money gold in the world to pay one year's interest.

If not even the interest on the world debt can be paid, either in gold or in goods, why do the financial interests that control it persist in a policy that further increases the debt, and at the same time further impairs the ability of industry to pay? Their attitude can not be explained on grounds of material self-interest alone. A debt against industries that are bankrupt is of no value to anyone. If world creditors persist in their present policy, it will be only a few years until Europe will be unable to produce enough to keep itself from starving, and the financiers must ultimately starve with the people they are attempting to

exploit. The ruin of the countries of the New World would be longer delayed, because their tremendous natural resources and their exceptional individual enterprise, initiative and energy will enable them for a time to carry the burden of accumulating debt. But the end is as certain as it is in the Old World. Debt was the ruin of ancient Egypt, of Babylonia and Assyria, of Greece and of Rome, and the civilizations of the Middle Ages; not debt resulting from individual slothfulness, waste and extravagance, but debt due to the excess profit and interest charges extracted from the industries of the people by the holders of economic, industrial or financial privilege.

A possible explanation of the attitude of the financial powers toward the existing economic and industrial problem is that they aim to establish themselves as the successors of the political, military and social autocracies that were overthrown as a result of the war. This would be the natural development of events, even if the financial powers had been antagonistic to the deposed autocracies. But the fundamental causes of the war that resulted in the overthrow of the political and military autocracies are known to be financial and economic. On the part of the German States, the war was supported by financial interests in the hope of securing world financial domination, and the policy of the Allies was also largely shaped by financial interests in the defense of the economic and commercial advantages already in their possession. A secondary motive is found in the desire to stem the rising tide of socialism, that menaced the power of the autocracies at the beginning of the war. Moved by their fear of the common menace, social, military, political and industrial autocracy made common cause. They counted upon an appeal to race hatred, economic rivalry and national patriotism, to make the people forget the wrongs they were suffering at the

hands of their own rulers. They even pretended that the war was being fought for the protection of the individual and the social rights for which the more progressive and radical among the people had been contending. The autocracies by the use of these pretences were successful in securing the support of the people. On both sides, those who fought the war cherished the belief that they were fighting for their sacred rights. But the price paid by their rulers was the overthrow of political and military autocracy. The financial autocracy remains.

The threatened breakdown of modern civilization is not the result of the late war. Instead, the war itself was the inevitable result of economic decay and political disintegration that have been going on for a hundred years. This process began in the collapse of the autocratic political and industrial institutions that were built upon the ruins of feudalism, in the period preceding the French Revolution, which marked the beginning of a world-wide uprising of the common people against all forms of autocratic oppression. The French Revolution and the uprisings in other countries that followed it, destroyed the feudal aristocracy, overthrew the temporal power of the Church, and toppled from their thrones the kings and princes who did the will of the old aristocracy, whose power was based upon industrial oppression. But autocracy was reëstablished on the basis of wealth, through the control of natural resources, commerce and finance. The pre-war governments were dominated by this new interest. The government of England was controlled by landlords, merchant princes and bankers, who used it as an agency to support their domination of world trade. Like conditions existed in France, Germany and Italy; and the supposedly autocratic Tsars of Russia were the puppets of a bureaucracy that represented industrial monopoly and economic privilege.

Representatives of the deposed autocracies in Europe admit that their downfall was inevitable. They also admit their inability to assume leadership in the reconstruction of industrial and political institutions. Nor have they any faith in the classes representing wealth, education or culture. It is admitted that all the old bonds that have held the masses in subjection to the will of the supposedly superior classes are rapidly dissolving. But though all agree that the old political, industrial and social institutions have broken down, and that autocratic policy and leadership have failed, there is no expression of hope for peaceful reconstruction on democratic foundations and by democratic methods. It is assumed that sooner or later Europe must come under the domination of red radicalism, and that the rule of the radicals will be necessarily inefficient, oppressive and destructive. Europe seems to be able to think of its future only in terms of revolution, and of revolution only in terms of violence and anarchy.

These ideas are held by all classes; and it seems to be agreed that no order can come out of the chaos of revolution, except by the creation of some new kind of autocracy to take the place of the old. Under the guise of national communism, an autocracy has been set up in Russia that seems to be in many ways as cruel and oppressive as was that of the Tsars. The democratic organizations of German workers, which were chiefly instrumental in the establishment of the present German Republic at the end of the war, seem about to be subverted to the purposes of a combination of business interests that, if succesful, threatens to reduce the people of the Germanic countries to their former condition of industrial servitude. Autocratic imperialism shapes the thought of the political leaders of France. Liberalism in politics and in industry has received a severe set-back in Italy, in Belgium, in the Scandinavian

countries and among the nations of eastern Europe. The liberal industrial and economic policies that in England, during and immediately following the war, promised a new era of peace and prosperity, are now largely abandoned; and the oligarchy that for a hundred years has dominated British policy is assuming its former attitude of arrogance and intolerance. Frightened by the bogey of bolshevism, a monster that is largely the creation of the newspapers, even the American people have permitted privileged financial interests to resume control of their industries and their government, and have even granted them greater powers and privileges than they enjoyed before the war. Our courts are being prostituted to serve the purposes of corporate monopoly. The chains from which labor was temporarily released during the war are being riveted on again. In a country where production was recently so great that the markets were glutted, producing the worst industrial crisis in its history, working men and women have recently been reduced to starvation wages, and their protests are answered by the flash of bayonets and the rattle of machine guns. Throughout the civilized world, events are rapidly shaping towards the attempted restoration of autocracy, by means of the control by corporate interests of the resources and industries of the people.

There can be but one result of such an attempt. Even if it were economically possible to reëstablish the industries of the world on an autocratic basis, no civilized people will ever again for long tolerate any kind of autocracy. Autocracy is forever discredited, even among its own supporters. Unless some other basis can be found upon which to reëstablish its economic and political institutions, modern civilization is doomed.

Though Europe is profoundly right in ascribing its present distress to the failure of political and industrial

autocracy, it can find in its history no support for the assumption that there is no constructive principle in democracy. On the contrary, every really constructive movement in the history of Europe has been democratic. The French Revolution began in an orderly, peaceful and lawful assembly of the representatives of the people, which resumed in their behalf rights and powers that had been usurped by the feudal autocracy, and proceeded to adopt measures for averting the ruin that threatened the country as a result of autocratic oppression and incompetence. There was no violence until the revolution had been treacherously and unlawfully attacked by the deposed autocrats; and the members of the revolutionary government displayed more intelligent and constructive statesmanship within a few months than the old régime had shown in a hundred years. The same was true of the American Revolution, which was the first of those great modern uprisings of the people against the oppressive political, social and industrial autocracies that had been built upon the ruins of feudalism. The American Revolution was initiated by a series of orderly, peaceful and Constitutional meetings of patriotic and loyal subjects—of English freemen—in the exercise of their Constitutional rights as Englishmen, and their inherent and inalienable rights as human beings. The Revolution was constructively complete with the adoption by the Continental Congress of the Declaration of Independence. Violence and bloodshed occurred only when, wholly without Constitutional warrant or authority, the people were attacked by the armed forces of the British king and the English parliament, who were doing the will of a commercial oligarchy that had usurped the powers of the English government. Not revolution, then, but unlawful resistance to revolution was responsible for violence and disorder in each of these great modern constructive and

democratic movements. This has been true in the case of every revolution that has had for its purpose the securing of the inherent rights of the people; that has been organized and conducted in accordance with the fundamental principles of democracy.

But it is not only in the crises of history that democracy has proved its superiority over autocracy, as a method of orderly and constructive progress. Civilization itself consists in the expansion of the lives of individuals and the adjustment of social relations to permit of the greatest possible liberty of individual thought and action. Democracy is an expression of the principles upon which alone such expansion and adjustment can be accomplished. It is, therefore, the only constructive method of social organization and progress. Democracy is necessarily peaceful and constructive, because it operates through voluntary association, instead of at the fiat of an autocrat or under the tutelage of a supposedly superior class. Democracy has proved itself in every period of the world's history. It represents the inevitable forward movement of the race towards the achievement of its ultimate destiny, which is the realization of the greatest possible measure of freedom of individuals, in the carrying out of their individual and social purposes, which means the fullest possible realization of individual and social life, and the highest development of individual character.

The orderly development of civilization is, therefore, necessarily democratic. Disorder, violence and destruction come when this orderly development is obstructed; and obstruction is, in most cases, due to the ignorance, the stupidity, the arrogance or the injustice of individuals or classes who lay claim to some kind of superiority over their fellow men. Special privilege, based upon the assumption of superiority by birth, wealth, intelligence, culture, social

prestige or political preferment is always the basic element in autocracy. It is often said that injustice results from the abuse of special privilege. The truth is that the enjoyment of special privileges is in itself the greatest of injustices. It is irreconcilable with the equal rights of individuals, and it is destructive of industrial, social and political progress. It is wholly at variance with the fundamental laws that govern the association of men with each other as members of society.

But it is quite unlikely that any direct control of the industrial or political institutions of civilized nations will be attempted by the great financial interests. They are too well aware of their own lack of constructive ability. Furthermore, the natural psychology of the financier is such that it unfits him for constructive leadership. The financiers must be well aware of the fact that industry can not go forward at all, unless there be at least the appearance of democracy. The danger does not lie in any direct attempt to restore autocracy in any of the old forms. Once overthrown, no autocratic system has ever been able to reëstablish itself. It is altogether unlikely that the privileged industrial and financial interests that seem to hold the fate of civilization in their hands, will seriously adopt any method so crude as that of supporting a deposed monarch or a decayed and impoverished aristocracy. Their power lies in their ability to capitalize the productive energies of the people. The deposed autocrats and aristocracies have nothing worth capitalizing. It is democracy that special privilege will endeavor to capitalize. On the pretense that industrial efficiency is impossible except when industry is controlled by those who operate it only for private profit, they will oppose every attempt to reorganize industry on a fundamental democratic basis. They will continue to utilize the fear of red radicalism to discredit

every proposal to give to those who do the work of production a just share in the control of industry and in the distribution of its products. They will continue the pretense that farmers and wage-earners must accept starvation wages, in order that profits may be accumulated for use as capital, though the profits already accumulated, representing not capital but debt, are breaking the back of industry. The method employed by special privilege for the exploitation of the industries of the people is not that of external attack. They are attempting to defeat the realization of the ultimate purposes of democracy by "boring from within"; by exactly the same process they so persistently impute to the friends of democracy.

The crisis in which civilization now finds itself is in all fundamental respects similar to that which existed at the beginning of the modern era of political reconstruction that was ushered in by the American and the French Revolutions. Now, as then, the progress of democracy is temporarily halted by the inability or the unwillingness of privileged classes to go forward with the general advance of humanity. Institutions established to serve the interests of the people, and therefore essentially democratic in origin, have become autocratic and oppressisve, as they always will unless the people are constantly on the alert to safeguard their liberties. The one important difference is that, in the earlier crisis, autocracy worked chiefly through political forms, while now it employs chiefly financial and economic methods. But this difference is rather apparent than real. The power behind the British throne at the time of the American Revolution was a commercial oligarchy, allied with a landed aristocracy. The old régime in France was based upon feudal slavery and industrial and commercial exploitation; and today autocracies that are based directly upon industrial and financial privilege employ

every other means within their power that will help them to gain their ends. The history of autocracy is always and everywhere the same; it begins in the abuse of powers and privileges granted by the people for public purposes, and develops into a system that asserts its superiority to the will of the people. The end of autocracy is everywhere and always the same. Autocracy never reforms itself. It always accumulates power by every possible means, and becomes constantly more arrogant and oppressive in the use of power, until it is overthrown by the people, or falls under the weight of its own iniquity and inefficiency, dragging down with it the ill-fated civilization that has not developed within itself the vital forces of democracy.

The action taken by the founders of the American nation exactly marks out the course for us to follow in the present crisis. They reconstructed their political institutions in accordance with the fundamental principles that, from the very nature of human kind, must govern all the relations of individuals to each other. These are the principles of democracy. They declared that all men are created equal and are equally endowed by their creator with certain inalienable rights, among which are the rights to life, liberty and the pursuit of happiness. It is evident from the statement of these rights that they apply to industrial as well as to political relations; to the activities by which the lives of men are sustained, as well as to the activities by which they regulate their life-sustaining activities. This fact was recognized by the founders of the American nation, when they declared that "for the securing of these rights, governments are instituted among men."

In the present crisis, we have no choice of methods. If modern civilization is to be preserved at all, it must be reconstructed fundamentally on democratic principles. The

old autocracies are gone. No new autocracy is possible, unless it can be established on an industrial basis, by capitalizing the economic needs and the productive energies of the people. But the needs of the people will yield profits only to the extent that they are able to buy industrial products, and the energies by which these products are created will be destroyed, unless the rights and the free activities of the producers are protected, and unless they are allowed to share the fruits of their labor according to their needs, as measured by their expenditure of energy in production. The so-called "capitalistic" system itself depends for its very existence upon the democratic reorganization of industry. Even if the old autocracies could be restored, they could not endure unless normal industrial production be restored; and normal industrial production depends absolutely upon the democratic reorganization of industry. The people can not resume their normal social, moral and spiritual life until their industrial relations have been readjusted and their means of living made secure. The disruption of industry undermines the very foundations of human society. There is to-day no question that the industries of all civilized nations are in a state of chaotic uncertainty. In the Old World they are in an advanced state of decay, that, if not soon arrested, will result in the collapse of European civilization. In the New World, an industrial organization the most promising that has ever existed in the history of mankind, and that is essentially democratic in origin and development, is threatened by the growth within itself of economic privilege, that apparently aims to establish an industrial autocracy under the name and sanction of democracy.

Even if it were possible to establish such an autocracy, nothing could be more futile and foolish. Its end would be swift and certain. It could draw to its support none of

the social or moral prestige that sustained the old autocracies. It could not rest its claims on industrial efficiency, because the moment that industry falls completely under autocratic control, the inefficiency of industrial autocracy will be apparent to all. The autocratic methods thus far employed by privileged monopoly in this and other countries are already discredited, and the people are learning to penetrate the hypocritical pretense that these methods are employed in the interest of the public welfare. The people can no longer be hoodwinked into believing that they must sacrifice their industrial rights for the sake of industrial efficiency. They are learning that industrial efficiency and industrial justice go hand in hand, and that they rest upon the same fundamentally democratic principles. When the people come to a full realization of this truth, the progress of mankind will no longer be arrested by attempts to establish autocratic power on the basis of special privilege. The people will not tolerate it, and the would-be autocrats themselves will recognize its utter futility.

In the foregoing review of world conditions, we do not mean to imply that civilization is approaching dissolution. It is not civilization, but autocracy, that is being dissolved; and the dissolution of autocracy will clear the way for the reorganization of the institutions of civilization on an enduring basis of peace and prosperity. There are ample grounds upon which to rest the highest hopes for the future of mankind, if only we can come to a common understanding of the fundamental principles that underlie our common problem. These are the principles of democracy, that are written into our constitutions, recognized by our greatest jurists in the interpretation of our constitutions, and revered by all who believe in human justice, as the basic principles upon which our civilization has been constructed. It is upon these principles that we shall rest the

plan for the reorganization of industry presented in this book. We propose to show by analysis of industrial organizations, past and present, that these are the principles that have determined the progress of mankind from the earliest beginnings of human society to our own time. We shall show that nations have prospered where they have understood and adhered to these principles, and that they have failed and fallen into decay where they have ignored or violated them. We shall show that these principles govern alike economic efficiency and industrial justice; and that by their observance we can establish permanent industrial prosperity in our own country, and at the same time point the way by which a stricken and distracted world may emerge from the economic, political, social and moral chaos into which the collapse of autocracy has plunged it.

II

THE HISTORY OF DEMOCRACY

THE history of democracy is identical with the record of human progress. It is the story of the striving of the human race for better conditions of individual and social existence and for fuller realization of all the purposes of living. Always the nations that have made most industrial progress are the most democratic, and always the most democratic nations have built up the highest and the most humanly valuable civilizations.

Among all the peoples of the ancient world, the Ionian Greeks were the most highly civilized. They attained the highest development in literature, in the arts and in science, and in social and political organization. They were the first to adopt democratic forms of government; and their political democracies were based upon industrial democracies, that were the result of the development of free individual activity, under conditions unfavorable to the continuance of the simple aristocracies and patriarchies that grew out of primitive communism. Trade was in primitive times controlled by family groups, as were all social, political and industrial affairs. But the conditions of industry and trade on the shores of the Ægean Sea, where most of the earlier Greek colonies were planted, encouraged individual enterprise and led to the formation of new groups for industrial and commercial purposes, similar to the industrial guilds and commercial societies of the Middle Ages. In these groups distinctions of birth were lost and distinctions of wealth discouraged,

both by their laws and customs and by the natural conditions in which they lived, which were unfavorable to the amassing of huge fortunes. This was especially true of the Ionian Greeks who organized the first political communities that were definitely and consciously based upon a recognition of the principles of human justice; and among whom all the works of civilization reached their highest development in the ancient world.

At the beginning of the Christian era, these democratic communities had spread themselves over all the shores and islands of the eastern half of the Mediterranean Sea. They had made settlements in Italy, Southern France and Spain, and possibly in Britain and in Ireland. These communities, held together by common industrial and social interests, and spiritually united by the teachings of Christianity, survived the so-called breaking up of ancient civilization, which was really the breaking up of Old-World aristocracies, political depotisms and military autocracies. Though early Christianity, both in doctrine and in practice, leaned strongly to industrial communism, and tended to exalt sacrifice above right and charity above justice, it carried over into the Middle Ages and modern civilization the idea of human equality. When industry recovered from the anarchy that followed the dissolution of the Roman Empire, it was established in the guilds on the basis of equal rights and equal service. The guilds, growing out of the earlier industrial communities, were social and religious, as well as industrial organizations. They found in Christianity a spiritual sanction for the liberties they claimed for themselves and their members. They defended those liberties by their wealth and by the power of their organizations—due to the fact that their products were indispensable to the political and military rulers of Europe—and, when necessary, by force of arms, against

barbarian invaders, feudal lords, kings and emperors.

No more than in the case of ancient civilization did medieval civilization disappear with the fall of the political and military autocracies that it produced. Rather it was preserved because of their fall. The principles of ancient civilization were carried through the so-called "Dark Ages" in the guilds and other similar democratic organizations. Modern civilization, as distinguished from ancient and medieval civilization, grew out of the assertion by individuals, communities and nations of the right of self-determination. It is the result of the convergence of numerous movements, beginning in widely separated parts of Europe and among different classes of its population, all of them essentially democratic in character. The beginnings of these movements are not found in the wise planning of beneficent rulers nor in the superior guidance of social or intellectual aristocracies. They were not the result of conflict or conquest. They were deep-rooted in the practical needs, the fundamental sympathies and the inherent sense of justice of ordinary men and women. They were expressions of the desires of the people for better conditions of living and of their striving for the realization of the ideals they developed in their attempts to better their material and social conditions. The breaking up of autocratic institutions made it necessary for individuals and communities to depend upon their own resources, their own intelligence and their own energy. Undemocratic institutions were discarded in the course of progressive economic, social and political adjustment; were destroyed as a result of revolution, or fell into decay because they were no longer an aid to human progress. Civilization was reconstructed from the bottom, by the application of the basic principles that govern the association of men with each other, which principles were

progressively demonstrated and made definite in the very process of reconstruction.

All of the great movements that mark the beginning of modern civilization can be traced to industrial or social beginnings. If they appear to be wholly religious, it is because to the medieval mind it was necessary that every purpose or undertaking have a religious sanction. The ideas that developed out of the social and industrial experiences of the people expressed themselves in literature and in art, as wider industrial and social experience provided new sources of information, as better conditions of living gave more leisure for the cultivation of the imagination, and as increased individual freedom released the mind from the thraldom of social convention and theological dogma. But science, literature and art; social, moral and religious ideas—all the higher developments of individual and social life—were rooted in those most fundamental and necessary activities by which the lives of individuals and societies are sustained.

It is a fact well known to historians that the progress of civilization is closely associated with the growth of trade. The development of modern civilization, keeping pace with the progress of democracy, may be easily traced along the trade routes that traversed Europe by land and sea. The splendid civilizations of Venice, Naples, Florence and Genoa, essentially democratic in their beginnings, and throughout their history, until checked by conquest or internal usurpation, were the work of industrial communities, not the products of those gigantic political or military systems that for centuries dissipated the wealth and spilled the blood of Europe in perpetually renewed contests for autocratic power. Following the routes of trade, early Christian missionaries transplanted industrial democracy of the communistic type to Britain and Ireland and the shores

of the North Sea. Christian communism took quick root in communities that plowed their fields with coöperative teams; ground their grain in community mills; and baked their bread in community ovens. The doctrine of love and service taught by the monks was all the more eagerly welcomed by pagan village communities from the fact that they were hard beset by predatory war bands, that were seizing their lands and enslaving their people. The old bond that held these pagan communities together was that of kinship; but there had already been such a shifting of population by migration and conquest that a new bond of union, a new common purpose, a new social and spiritual inspiration were needed. These were supplied in the teachings of the Christian missionaries, who carried to the primitive democracies of western Europe the doctrine of the brotherhood of man and the fatherhood of God that was preached by the Saviour and His apostles. The religion that was taught by these early missionaries was not the dry and lifeless formalism that later dominated the minds of Christian Europe. It was a religion of humanity, capable of practical application to all the affairs of individual and social life. These missionaries instructed their converts in improved methods of agriculture, taught them better to conserve their resources and their products, introduced more economical and just methods of industrial and social organization, and applied the principles of Christianity to the adjustment of social and industrial relations. The ideal aimed at by their teaching was a spiritualized industrial and social democracy. In so far as that ideal was realized, the early Christian missionaries laid the foundations upon which the institutions of Western civilization have been erected.

Trade grew up among these Christianized democratic communities, and between them and the Italian cities.

Merchants banded themselves together for protection against pirates on the sea and legalized and unlegalized robbery on the land. There arose permanent commercial organizations, for the purpose of protecting the equal rights of their members to navigate the seas, to carry goods over the highways and to trade among themselves and in foreign lands. They adopted codes of law which became the basis of the maritime and commercial codes of modern nations. These maritime and merchant codes, supplemented by principles drawn from Roman law, were made the basis of modern international law. The "Law Merchant" governing trade between private parties of different nationalities, was also incorporated into the national codes of Western countries. The Law Merchant defined the obligation of contract between individuals: international law, based on the common customs that came to be recognized among nations, and incorporated into the codes of the early commercial associations, supplemented by treaties entered into among the nations, defines the rights and obligations of nations. A treaty is an international contract. The essential element in contract is equality of the rights and obligations of the parties to a contract. This implies equality of the parties, whether individuals or nations, with regard to the matter of the agreement embodied in the contract.

Thus, social life, industry, commerce, politics and law were based upon the fundamental principles of human equality, which are the fundamental principles of democracy. But these principles were not first discovered and applied by the political and military autocracies that held sway in Europe during the Middle Ages and in early modern times; nor did they willingly accept them. These principles were forced upon the rulers of Europe by their subjects, in the course of a series of negotiations, com-

promises and revolutions extending from the first beginnings of the feudal system to our own time. The progress that has been made in the defining, application and working out of these principles marks exactly the progress of civilization through every stage of its development.

Medieval democracy reached its highest development in the guilds. These were primarily industrial organizations, but they developed their own local social and political customs, their own local government, their own culture and often their own religion. These societies probably grew directly or indirectly out of village communities, which farther back were groups of kinsmen; each having common customs, a common religion and a common industrial policy. In the guild, the fact of kinship had disappeared; but the idea of brotherhood remained. It symbolized industrial, social and spiritual equality. But the guilds stressed the idea of the equal freedom of individuals more strongly than it was stressed in the earlier Christianized democratic communities. This marks the development that had taken place in the transition from primitive communism to free coöperation. The guilds did not organize a uniform system of socialized industry, establishing a centralized authority over the activities of their members, but encouraged and protected individual initiative and enterprise. They protected the equal rights of individuals to the use of natural resources, the disposal of the fruits of their labor and access to markets. They penalized monopoly and placed a ban on every kind of industrial, commercial and financial exploitation. They aimed to establish industry on the basis of equality and justice, as demonstrated in the individual and social experiences of their members.

The government of the guild was an industrial democracy. The craft, or trade, was the unit of organization,

having the ordering of its own internal affairs and being represented in the councils of the guild through persons chosen by the votes of its members. The guilds often united in larger civic organizations, and many of the most important towns and cities along the principal trade routes were founded by them. Paris, Ypres, Antwerp, Amsterdam, London and many others of the great industrial and commercial cities of the Old World were built or rebuilt by these democratic associations.

The guild-method of organization was extended to commerce. Merchant guilds became the strongest power in the shaping of the policies of commercial and maritime communities. Leagues of "free cities" were formed, for the reconciliation of trade conflicts, for the development of common policies of trade, and for the promotion and protection of the common interest of their members. The Hanseatic League, a confederation of commercial and industrial cities in northwestern Europe, adapted and developed the maritime and merchant codes of the earlier traders, for the regulation of industry and trade among themselves and for the carrying on of trade with the Mediterranean cities and with foreign countries. These codes were designed to protect the equal rights of the members of the League, as the laws of the cities protected the equal rights of the guilds, as the laws of the guild protected the equal rights of the crafts, and the laws of the crafts the equal rights of their individual members. Thus the entire structure was grounded on the equal rights of individuals, in the carrying on of the activities by which their lives were sustained, and out of which grow all other activities and interests. The leagues of free cities were confederations of civic democracies, based upon industrial democracies, and instituted principally for the protection of the equal industrial rights of these industrial democracies.

The guild idea was not confined to industrial organization. Guilds were organized for the promotion of social recreation, literature, art, science, education, general culture and religion; in fact for almost every conceivable human activity. The governing principle was always an activity or interest in which a number of individuals could unite on a common basis of equality with regard to the particular activity or interest. This enabled them to coöperate for a given purpose no matter how much their ideas and interests differed with regard to other things. The guild organization was the most effective of all the organizations of medieval and early modern times, because it protected the equal rights of individuals, developed individual initiative, skill and enterprise, and provided a method of free coöperation, thus bringing together the intelligence and the efficiency of individuals in the functioning of the entire community for the supplying of the wants or for the achievement of the common social, political or religious purposes of its members.

It will be impossible more than barely to indicate the beneficial achievements of these democratic organizations, or the tremendous importance of their contributions to modern civilization. History has given them scant attention. Yet it has been impossible entirely to bury them under the mountains of rubbish that has been accumulated under the name of history. It is known that the guilds were active in the financing of the crusades; that the "great lay companies" furnished the skilled and unskilled labor, the organization and much of the capital for the building of the cathedrals of the Middle Ages.

It is known that it was chiefly through these democratic organizations that the Italian cities of the Middle Ages built up their industries, expanded their trade, defended their liberties and contributed to the world products of

literature, art and science that aided greatly in the building up of modern civilization, and that will be a source of inspiration and delight as long as men dwell upon the earth. History reluctantly concedes to industrial democracy the principal part in the development of the civilization of the Netherlands; and it admits that the guilds played an important part in the building of the greater English cities; but it has never been able sufficiently to rid itself of the blindness engendered by the false splendors of autocracy, to see that the fundamental interests, the necessary activities and the deep-rooted human instincts and sympathies of the people are always and everywhere the determining forces in human progress.

There are many evidences which point to the conclusion that industrial organizations and interests were largely concerned in the founding and the maintenance of the medieval universities, both on the Continent and in England. Cambridge (Cam's Bridge) was at first a group of log and mud-built hovels, surrounded by a log stockade, where traders camped on their way from the sea-port towns to the interior. Oxford (Ox Ford) was another such camping place. We may easily picture the gatherings that assembled around the camp fires at these resting places. Returned sailors, recounting tales of strange adventures in far places beyond the seas; merchants, exhibiting gorgeous tapestries from the East, Italian art treasures, precious stones, or bubbles of glittering "crystal"; itinerant scholars, discussing the mysteries of medieval philosophy, or explaining the "seven liberal arts"; wandering minstrels, enlivening the company with the songs of trouvère and troubadour, interspersed with modest lays of their own making; priests and missionaries, explaining the subtleties of theology and the truths of holy writ, and exhorting to Christian faith and duty. Such were the crude, but

democratic and human, and therefore entirely adequate beginnings of the great English universities.

It was similar with the beginnings of learning on the continent of Europe. The great educational and cultural institutions arose at the industrial centres and along the routes of trade. There was traffic in products of the mind and things of the spirit as well as in material goods. Education had been organized in the monasteries; but there it was chiefly concerned with formal theology and moral precept. The early Christian missionaries in western Europe carried it out among the people, instructing village communities in agriculture and in economic and social organization, and giving to the guilds of the towns and cities the benefit of their study of the industry and trade of older civilizations. But it seems that in most instances the great universities originated in wholly spontaneous gatherings of men of varied experience and divergent intellectual views at the centres of trade. It was an entirely natural development. Ideas grow out of experience. Where experience is narrow, ideas will be equally confined and inadequate. Where industry is free and natural conditions favorable, experience broadens, intercourse is extended, ideas grow and the intellect expands. Where industry is confined and restricted, experience is meagre and the intellect is cramped and dwarfed.

By the beginning of the twelfth century, the blight of feudalism had spread itself over the greater part of Europe. The free agricultural communities of earlier times had been reduced to serfdom. Nowhere did industry enjoy a measure of liberty except in the free cities. Elsewhere, political and military despotism had raised its structure of oppressive autocracy on the foundation of industrial slavery. In the free cities the social and political affairs of the people were ordered according to the same prin-

ciples of equality and justice that governed their industrial relations. In these communities there was realized a general condition of security and freedom not to be found at that time anywhere else in the world.

It is, therefore, not strange that men who chafed under the restraints of feudal tyranny and who sought intellectual, moral and spiritual freedom should seek refuge in these industrial communities. It should cause no wonder that at one time there were thirty thousand students at the University of Paris, assembled from all parts of Christendom, and many from Moslem countries in Africa and the East, listening to teachers of their own choosing, under a government of their own creation, administering laws of their own making. It is not strange that the democratic cities of Italy should have been the nurseries of philosophy, science, literature and art, nor that the English cities should have contributed so greatly to the principles of English political liberty. It is not strange that a community of fishermen, farmers and artisans behind their sea walls on the shores of the northern ocean should have been the first in western Europe to produce works of science and art that might challenge comparison with "the glory that was Greece and the grandeur that was Rome."

These were the constructive forces that were chiefly instrumental in the building of the institutions of modern civilization out of the fragments of disintegrating feudalism, on the ruins of old Rome. They accomplished their purposes in the face of destructive forces that kept Europe in a state of constant turmoil. Struggles among feudal lords, between lords and kings, and between kings and the Emperor created an unstable condition of industrial and social life that rendered constructive progress always difficult and often impossible. The spiritual and the temporal powers were far more often fighting each other than

working together for the common good. Militant Christianity was either making war upon the infidels of the East or defending itself against their attacks. Industrial communities were oppressed with heavy taxes to maintain the armies engaged in this strife, to support the pomp and splendor of courts, and to satisfy the ambitions of proud aristocracies or political and military despots. They paid heavily for military protection that they often were forced to supply themselves; and the armies maintained ostensibly for their protection were often employed to despoil them of their wealth and to deprive them of their liberties. A brutal soldiery was again and again turned loose to plunder the communities whose labor and enterprise were the sole source of its support.

Except in isolated instances, the national and international political institutions by which Europe was governed during the Middle Ages and early modern times were not democratic, either in origin or character. They were not created by the people or of the peoples' own choosing. They were not established for the protection of the rights of the people, but for purposes of conquest, exploitation and oppression. For a thousand years, wave after wave of military marauders harassed the land. For a time the invaders were content with plunder, but later they took possession of the land and reduced its inhabitants to serfdom. Other war bands followed, subduing the first conquerors, who thereafter occupied a middle position between the enslaved original inhabitants and the new rulers. While not admitted to social or political equality with their conquerors, this middle class desperately resisted being reduced to serfdom. As many of them were skilled in the arts of war, they were often taken into the service of their conquerors. They were given subordinate positions in the state, or there was farmed out to them the right to exploit

industry or trade. Society became stratified. There came to be a greater and a lesser nobility. There were knights, possessing land obtained as a reward for military services, through the friendship or favor of feudal despots, or as a result of their skill in political intrigue. There arose an aristocracy of wealth in many of the towns, based upon the usurpation of power and the abuse of privilege, within the industrial democracies, or upon industrial or financial monopolies granted by lord or king. Everywhere there was an ever-increasing population of individuals detached from the feudal classes because feudal oppression became unbearable, because they were outlawed on account of some real or alleged breach of feudal law or customs, or because they had been illegally deprived of their land, and therefore of their political and social rights, by their feudal superiors, or through the miscarriage of justice in the administration of a system of law so intricate, so arbitrary and so corrupt that it was practically impossible for any who had not the favor of some one close to the seat of power to obtain even a hearing of his case.

In the reign of Edward III, the shifting population of England was estimated to be one-third of the total population. At one time "vagabonds," gathered on the outskirts of Paris in reprisal for the execution of one of their number, stormed the city, and during three days held its citizens in terror. These vagabonds were of the most diverse origin and character. Military free-lances; soldiers of fortune; soldiers discharged from service against "the infidel" in the East, and left to live or starve, as fate and their own devices should determine; "masterless men" from the towns and the feudal estates; serfs, who had fled from the intolerable oppression of petty feudal tyrants, or who had been evicted from their homes by pitiless landlords; renegade monks, friars and heretical preachers; scholars and

minstrels; jugglers and peddlers; thieves, robbers and beggars—these were the products of irresponsible feudal autocracy—this was the human wreckage of a system built upon industrial slavery and maintained by political injustice and oppression.

While plundering the free industrial communities, taking away their liberties and reducing their citizens to servitude, the feudal despots developed no economic efficiency of their own. Their serfs were scattered because their estates no longer produced enough to support them. Feudalism everywhere broke down, primarily on account of its industrial inefficiency; and it was industrially inefficient because it was industrially oppressive. Out of the ruins of feudalism there arose military oligarchies, based on the control of industry, commerce and finance. Such oligarchies flourished especially in England, France, Italy and some of the German States. They destroyed the feudal nobility, and took to themselves its prerogatives and distinctions. They reduced to submission many of the free cities, and in others supported bourgeois aristocracies that had been established by the usurpation of economic power and the abuse of industrial privilege on the part of some of their citizens. They imposed taxes even more oppressive than the feudal dues; the rights of personal liberty and private property were repeatedly violated; the guilds were corrupted or destroyed; and those great industrial and commercial confederations that had preserved the principles of democracy and had held European civilization together during the darkest period of the Middle Ages were disrupted or made to serve the purposes of these new systems of exploitation and oppression.

Government became the synonym for cruelty and oppression. Industry languished and commerce decayed. The institutions of learning and culture that the people had

created to aid them in their industrial, social and political progress and to satisfy their intellectual, moral and spiritual aspirations, were turned into instruments for the suppression of free thought, the enslavement of the moral conscience, and the destruction of intellectual, moral and spiritual ideals.

So hard were the conditions of life for tillers of the soil, industrial workers, merchants, religious devotees and fighting men, and even for many engaged in professional and official pursuits, that the uncertain fortunes of a life of vagabondage seemed preferable to the certain misery of their present existence. Medieval institutions began breaking up almost before they had assumed definite form; not because of the ignorance, disorder or lawlessness of the people—these were the results of tyranny and oppression—but because of the inherent injustice and inefficiency of the industrial, social and political autocracies that had acquired control of those institutions, and were using them not for the purposes for which they were created, the protection of the rights and the promotion of the welfare of the people, but for their exploitation and oppression.

But democracy had not been destroyed. Being, as it is, the essential expression of the individual and social lives of men, democracy lives so long as human life exists. The people had never wholly yielded up their liberties to the new forms of autocracy that built their oppressive systems on the ruins of feudalism. Not all agricultural communities had been completely reduced to serfdom. The guilds had not been entirely destroyed, or their organizations usurped and perverted, before they had infused their spirit of liberty into millions who carried it over into the period of modern political reconstruction, and made it the inspiration of a yet larger and more enduring democracy. But it was oppression itself that led to the overthrow of the oli-

garchies that supplanted the old feudal aristocracies. Among the hordes of those who were outcast and outlawed by the usurpers of feudal power there grew organized revolt. The Albigensians of southern Europe; the Hussites of Bohemia; the Lollards in England; the evicted peasants and the outlawed knights, priests, merchants, scholars, minstrels and artisans who organized the German Peasant Revolution and wrote the first declaration of independence, were the pioneers of the Renaissance and the Reformation, and the political revolutions that followed in their train. All these constructive revolutionary movements grew out of fundamental industrial and social conditions. They all asserted the equal and inherent rights, the recognition of which is essential to the existence of human society. They were all manifestations of the spirit of democracy that has lived in the hearts of men since the beginning of the world, and that is the moving force in all human progress.

Vainly the autocracies attempted to suppress these revolutionary uprisings which swept over Europe with the resistless force of a tidal wave. But then as now autocracy had more subtle and effective methods of defending its power than that of open physical force. Realizing the futility of resisting these movements, the wiser and more farseeing of the political rulers fell in with them and usurped their leadership. Constructive revolution was betrayed, turned from its true purposes, and made to serve the interests of autocracy. The result was that two centuries after the beginning of the Reformation and the kindred movements in which democracy found expression after the beginning of the disintegration of feudalism, autocracy seemed more securely established than ever before. Political oligarchies, supported by industrial monop-

oly and commercial and financial exploitation were firmly established in England and in France. Philip of Spain, inheriting the overlordship of a large part of the European continent and the vast possessions of Spain in the New World, had represented the most powerful and oppressive military autocracy that had existed since the downfall of the Roman Empire. The power of Spain had been broken by the English sea adventurers in the destruction of the Great Armada, clearing the way for the struggle between the rival oligarchies of England and France that kept the world in turmoil for the next two hundred years. The labor and the lives of the people were sacrificed in wars perpetually renewed, that had no other purpose than to decide which of two rival autocracies should continue to exploit and oppress the people.

In the name of patriotism, of "law and order," of religion and morality, political liberals and religious reformers were everywhere harassed and persecuted. In France the Hugenots had been scattered or exterminated. The English Puritans had been suppressed or forced to migrate. After a struggle, the story of which deserves a place among the great epics of history, the Netherland republics had thrown off the power of Spain, but had yielded their liberties to their own aristocracies, grown arrogant by the abuse of power acquired by the exigencies of war. The free cities had either been reduced to subjection or had made common cause with the industrial and commercial bourgeoisie, the greater number of whom supported the oligarchs. Nowhere did freedom exist—in religion, in politics, in science, art or literature, or in industry. Social institutions were rapidly disintegrating. Industry was at a standstill. Trade languished. Politics were unbelievably corrupt. The people were ruled by libertines, who

were the puppets of courtesans. If Europe had remained shut up within her own borders, there might soon have been an end to her civilization.

But there had taken place an event that was destined to change the entire course of modern civilization. The expansion of the European mind, the discoveries of science, the development of social, moral and spiritual ideals, and the growth of a restless spirit of adventure, that were products and manifestations of the democratic movements we have described, led to the discovery of the New World. This was more than merely the finding of new territory. Europe was not especially in need of more land. There lay undiscovered beneath the soil of England, mineral resources that later enabled her to become the greatest manufacturing and commercial nation in the world. There were vast forests on the continent of Europe that were sources of danger instead of sources of industrial benefit; breeding places of malaria and harborage of robber bands. There were vast reservoirs of oil that later were to involve the nations in bitter and destructive warfare. There was little congestion of population except in the larger cities; which was not, however, because of any lack of unoccupied land near at hand. There were vast stretches of wilderness extending almost to the very walls of London, Paris and other cities. There were apparently inexhaustible fishing gounds among the channel islands and in the northern seas. Italy, the Levant, France, Germany and Holland, the Scandinavian peninsula, and the vast and virgin plains and forests of Russia, offered unlimited opportunities for industrial development and commercial expansion.

Why were not these resources developed and utilized? It was not because of the lack of diversity of resources. The Mediterranean countries were capable of producing

semi-tropical fruits and other products in sufficient quantity to supply the wants of twice the then population of all Europe. France had diversified agricultural resources that, if fully utilized, would have supported in comfort and luxury several times her population. Spain, the British Isles, and northern and eastern Europe could have produced more than enough wool to supply the needs of all the peoples of the Old World. There was enough and to spare of furs, timber, and iron ores in the northern countries to be exchanged for the products of sunnier climes in the south. Water routes between northern and southern Europe, through the North Sea, the English Channel, the Straits of Gibraltar and the Mediterranean had been well established, rendering unnecessary the crossing of the frozen barrier of the Alps. So far as natural resources were concerned, Europe could have been self-contained for a thousand years, with no serious deprivation of economic products.

It was not, therefore, geographical limitations that confined European civilization at the time of the discovery of the New World. It was bound with fetters of its own forging. It was smothered by musty and outworn custom; stifled by useless convention; hampered by industrial, commercial and financial monopoly; weakened by senseless social prohibitions; enervated by the poverty of the many and the idle luxury of the few; and crushed under the burden imposed by political and military autocracy.

The supreme significance of the discovery of the New World is, therefore, to be found in the fact that it provided a means of escape from the restrictions that European civilization had imposed upon itself. It supplied an environment in which men of inventiveness, initiative and courage could build up a new individual and social life, based upon the fundamental principles of liberty, equality

and justice, that had been demonstrated in Old-World experience but violated by Old-World autocracies. It supplied the means of preserving those individual and social products of European democracy that had not been destroyed by industrial exploitation, religious persecution and political oppression.

The activities that led to the discovery of America represent the continuous expansion of the human mind; the irrepressible aspiration of the spirit of man towards greater freedom and a wider sphere of thought and action. In their material aspect, these activities manifested themselves in the development of industry and the expansion of commerce. On the intellectual side, they appear as the persistent determination of men of intellectual and moral courage in the face of social disapproval and autocratic persecution, to solve the mysteries of human life and its purposes. In their social aspects, they are manifested in that high devotion to the principles of human justice that rises superior to all considerations of personal ambition or of class-interest. In their spiritual aspect, they are the expression of that high devotion to truth that has been the inspiration of all great human ideals.

These are the essential elements that make for human progress. These are the forces that built European civilization. These are the products of democracy that, growing to fuller fruition in the New World, will preserve that civilization, and develop it to higher forms and more just and beneficial uses.

III

AMERICAN DEMOCRACY

GIVEN an autocratic policy on the part of any government, revolution is bound to come; and autocracy can always be depended upon to adopt the policy that will result in its own ultimate destruction.

The American revolutionists defined human rights and set forth in clear and unmistakable language the underlying principles of sovereignty and of government. These rights are defined and these principles set forth in the Declaration of Independence, which reduces to a few clear and definite conceptions ideas that have been in process of formation since the earliest beginnings of civilization. It expresses in language that the average man finds no difficulty in understanding the principles that govern all associations among men, and which constitute the very basis of human civilization.

The Declaration of Independence accurately expressed the convictions of the majority of the people of the American colonies. They understood it and believed in it, because it expressed the very principles that they had brought with them to the New World. The Declaration held it to be "self-evident that all men are created equal": America had been settled and was being developed under conditions that made equality in social, political and industrial relations not only possible, but in a high degree necessary. With the removal of Old-World restraints, the instinct that in all men demands liberty, equality and

justice, had reasserted itself; and social, political and industrial equality, as compared with Old-World conditions, had become an actual fact. The Declaration holds that all men are equally endowed with the right to life, liberty and the pursuit of happiness: the laws of the colonies afforded more equal protection for these rights than the laws of any other country in the world. There was more equal opportunity in the use of the means of living; and, with the exception of African slavery (the trade in which was condemned in the original draft of the Declaration) there was greater freedom of labor. The Declaration maintains that "for the securing of these rights governments are instituted among men": the American colonies had shaped their governments to that end from the beginning, and were maintaining that principle against its attempted violation by the oligarchy that had usurped the functions of the English government, and designed the destruction of the liberties of the English people, whether in the colonies or in the mother country.

While the Declaration of Independence expressed the convictions and appealed to the hearts of the majority of the people of the colonies, it was not accepted without reservations and misgivings by the "better classes" among them. From the beginning, the principles set forth in the Declaration were opposed by most of those who possessed considerable wealth or who occupied positions of social distinction or political power. Possibly there were some even of the signers of the Declaration who did not believe in its principles, but professed to accept them in order to unite the people in the support of the revolution, knowing that the people believe in these principles. It is likely that a majority of those who took part in the convention that drew up the federal Constitution honestly believed that democracy in government should be avoided by every pos-

sible means, while others opposed it from motives of selfish or class interest. When the news of the horrors perpetrated in the name of democracy in the course of the French Revolution was spread throughout the world, in America, as elsewhere, the majority of the respectable and wealthy classes laid the blame upon democracy, instead of upon the system of injustice and oppression that had brought upon itself these horrors.

This fear, distrust and hatred of democracy among men of wealth, power and social distinction greatly influenced the governmental policies that were adopted after the winning of independence. There was a strong reaction from the generous enthusiasm for the principles of universal justice set forth in the Declaration of Independence. Some even of the wisest and best of the revolutionary leaders showed a decided hesitancy in applying its principles to the actual affairs of government. There was manifested a strong leaning towards a government of men or of classes, instead of a government of principles and laws. Washington himself appeared to be not entirely free from the influence of this fallacy. He declared for a government that would appeal to "the wise and the good." Alexander Hamilton held that the government should be such as would receive the support of "the rich and the powerful"; and, then as now, the rich and the powerful assumed that they were also the wise and the good. And as long as they could dominate industry and commerce; as long as they could control the church, shape the course of education, and set the standards by which goodness and wisdom should be measured, they could exclude all but themselves from any part in the control of the affairs of the nation.

The development of social, political and industrial life in the United States, after the winning of independence and

the establishment of the federal government under the Constitution, was by no means uniformly in line with the principles of the Declaration of Independence. A landed aristocracy, based on slave labor, had taken root in the South. An aristocracy in many ways equally intolerant and oppressive, made up of religious, social and commercial elements, had grown up in New England. Old-World exclusiveness showed itself among the old Dutch and English families of New York, that had already laid the foundations for the building of the most powerful aristocracy of wealth of modern times. To these aristocrats Samuel Adams was an anarchist; Jefferson a dangerous radical; and Madison a well-meaning but unpractical idealist. Yet Adams was the moving spirit of the Revolution; Jefferson wrote the Declaration of Independence; and Madison wrote the draft that was accepted as a working model for the Constitution, and did more than any other man to secure its adoption. These aristocrats regarded the election of Jefferson to the presidency as a national calamity, and professed to believe that it forecast the destruction of the Republic. Democracy was as hateful to them as is socialism, sovietism or communism to present-day reactionaries, and probably carried about the same meaning. The election of Andrew Jackson looked like the end of all things respectable to the reactionaries of his time; yet it meant nothing more than that the people were assuming control of their own government, instead of leaving it to politicians, to be controlled in the interest of social or industrial privilege.

So it has been throughout our history. Slavery was upheld by leading statesmen both in the North and in the South as a beneficial social and industrial institution. Ministers of the gospel claimed for it the divine sanction. The abolitionists, Garrison, Lovejoy and Phillips, were

attacked in the press, from the platform and from the pulpit as dangerous and destructive agitators. Lincoln was an object of scornful tolerance among the "better classes" of the East until long after he became president. They regarded him as a natural product of a part of the country that seemed to them hardly to be civilized; and that was just the part where men were more equal and the principles of democracy most widely accepted.

After the Civil War, a new menace to the rights of the people appeared, in many ways more dangerous than slavery itself. This was industrial monopoly. Slavery controlled the labor of individuals: industrial monopoly dominates the lives of entire communities, states and nations. The owners of slaves managed their industries, supplying tools, food, clothing and shelter for the slaves; but under industrial monopoly producers often furnish capital, management and direction, as well as labor, and yet have less assurance of provision for their necessary wants than had the slaves on Southern plantations. Industrial monopoly exploits the mental, moral and spiritual qualities of its victims, as well as their physical energy. Industrial monopoly, when complete, enslaves body and soul. Under slavery the master was responsible for the keep of his slaves, at least to the extent that he was responsible for the keep of his beasts of burden: industrial monopoly, though controlling the means of living of all who come within the sphere of its activity, disclaims all responsibility for their welfare, or even for their efficient maintenance.

Natural conditions favored the growth of industrial monopoly in America. Seemingly inexhaustible agricultural resources lay open for exploitation. The discovery of vast deposits of coal, iron, oil and other minerals, and the invention of new processes for their utilization, gave oppor-

tunity for the building up of manufacturing industry on a gigantic scale. A constant stream of immigrants to settle the new lands of the West and to furnish cheap labor for the mines, railroads and factories flowed in from Europe. For a long time the very abundance of land made its monopoly impossible; but all the more valuable mineral and forest resources were soon brought under the control of a few powerful corporations, that found ways to absorb the earnings of the farmers through the control of transportation and marketing facilities. As population congested at industrial centres, land monopoly also began to take its toll from the hard-won earnings of the people. The enormous profits accumulated by the great lumbering, mining, manufacturing and transportation companies, secured and increased by investment in land, gave them control of the credit of the nation, thus enabling them to draw to themselves yet more of the earnings of farmers, wage-earners and other "independent" producers, while all consumers were placed more and more at their mercy. Finally, the industrial corporations themselves were brought largely under the control of a group of banking syndicates, so that a financial policy, directed to the accumulation of wealth, came to dominate American industry, rather than a policy directed to the supplying of the economic wants of the people.

Meanwhile, as the free lands of the West were filled up, so that there was no longer an outlet for the rapidly increasing congestion of population at the industrial centres, and as the stream of immigration continued to flow from the Old World, the condition of workers in the great corporate industries became constantly more intolerable. With an apparently inexhaustible supply of cheap labor, employers were able to fix wages and working conditions as they pleased. In justice to the workers, wages should

have increased and working conditions should have improved proportionately as the efficiency of industrial policy and management and the productivity of labor increased. A sound policy in the interest of the corporations themselves would have provided that wages should increase with general industrial efficiency, both in order to assure the maintenance of labor efficiency, and in order that the people would be able to buy the increased quantities of goods produced, so that profits could be made from their manufacture and sale. But it actually happened that, measured in terms of buying power—the only real measure of wages—the earnings of the workers were decreased as the efficiency of industry increased. Though a wise policy in the interest of employers would have dictated that the health and safety of workers be protected in order to maintain their productive energy, employers often showed less consideration for their employees than for their beasts of burden. It is not strange that under these conditions many workers came to believe that the harder and better they worked the less they would get for their labor, and that they should lose all sense of responsibility for industrial efficiency.

A wage level higher than in other countries has been maintained in the United States; but it has been done in the face of the stubborn resistance of great corporate employers. Great advances have been made in the protection of the health and the lives of workers; but again and again the corporations have employed the power of their immense wealth for the corrupting of legislatures, the courts, the press, and even the pulpit and the schools, to defeat or nullify the laws proposed or enacted for the furtherance of that humane purpose. Even when experience has proved that fair wages and reasonable working conditions conduce to labor efficiency, and thus increase the profits of

employers, the great corporate interests have continued their efforts to reduce the American worker towards the status of the coolies of the East or the peons of Mexico. So that industrial monopoly in America has not only trampled upon the industrial and political rights of the people, but its injustice to labor has retarded progress in industrial efficiency, thus injuring its own interests.

The American people were not slow to recognize the danger to their liberties that lay in the growth of industrial autocracy. Beginning with the granger movements following the period of the Civil War, and developing through the several stages of populism, the greenback and free-silver "heresies"; the revolt against the extortions of the railroads and the elevator, cold-storage and packing monopolies; the equity and other coöperative movements; the Nonpartisan League and the formation of agricultural "blocs" in State legislatures and in Congress, the farmers have resisted exploitation, and have found partial remedies in State and national legislation. Beginning with the organization of the Knights of Labor, and advancing to the powerful workers' organizations of to-day, workingmen have banded together to resist the degradation of labor. By negotiation with employers, by exerting their influence upon legislation, by the education of public opinion, and by aggressive industrial warfare as exemplified in the strike, they have prevented the complete enslavement of the wage-earner. The people at large have written into their constitutions the principles that shall govern industry, and protect the equal rights of all industrial interests, and have repeatedly demanded the enactment of laws for the enforcement of these principles. Yet industrial monopoly survives and is apparently growing stronger. It is the dominant influence in politics; it largely determines both State and national legislation; it aims to dictate our inter-

national policies; it has enslaved the press, and assumes to dictate to the Church; it is suspected of corrupting our courts; and it shapes the policies of many of our universities and colleges.

How is this situation to be explained? How is it that autocracy is able to dictate the industrial and political policies and so largely to control the lives of the people of the most democratic of modern nations? It is, in part, due to the persistence of the belief in the superior efficiency of industrial autocracy. It must be admitted that American industrial corporations, as a rule, have shown a higher efficiency than coöperative or publicly owned and operated industries. That is not because they are autocracies, but because they are corporations. The superior efficiency of the corporation is due in part to the fact that it operates under a grant from the public, bestowing upon it important privileges and immunities; and in part to the fact that it is a superior method of mobilizing capital, organizing and directing ability and labor. The corporation is a form of industrial coöperation, and not necessarily a form of industrial autocracy. It can be made to serve the purposes of industrial democracy even better than it serves the purposes of industrial autocracy. The corporation was originally created to serve the public interest; but industrial autocracy has perverted it to the uses of industrial oppression.

Industrial autocracy, then, has not created even the form of organization under which American industry has achieved such a high degree of efficiency. Much less has it created the substance of industrial efficiency. The qualities that have contributed so largely to the efficiency of American industry were developed before the great industrial corporations came into existence—before industrial monopoly had seized upon our human and natural re-

sources. These qualities were largely a product of life on the American frontier, where not only success, but the very existence of the individual depends upon individual inventiveness, initiative, enterprise and courage; and where as yet no system had been established to suppress or exploit these qualities. Instead of industrial monopoly having produced industrial efficiency in this country, it has capitalized, exploited and is rapidly destroying it.

Industrial justice—the recognition and the protection of the equal rights of individuals—is an indispensable condition of industrial efficiency. The principles of industrial justice are the principles of industrial democracy. These principles are set forth in the Declaration of Independence, and have been written into our Constitutions.

The Declaration of Independence states a universal principle governing the relations of men to each other as members of society. It declares that men are equal in those relations. It means that the interest in life, liberty and the pursuit of happiness of any individual is exactly equal to that of any other individual, and that it must be so considered in the establishment of human institutions. It means that the equal rights of any individual must be protected against every other individual, regardless of all difference in wealth, social distinction, political power, intellectual ability or moral character.

The Declaration of Independence—accepted by the ablest American jurists as our first and most fundamental Constitutional document—defines the rights of men, and declares that "for the securing of these rights governments are instituted among men." The rights are not defined in political terms. Politics has to do with government, and government, according to the Declaration, is only for the purpose of securing rights that are inherent and inalienable—that are not created by government, and that would

exist if there were no government. All men are declared to be equally endowed with certain inherent and inalienable rights, among which are the rights to life, liberty and the pursuit of happiness. It is not declared that all men are equally endowed with the right to vote, or to the "equal protection of the laws." Men institute governments for the protection of their equal, inherent and inalienable rights to life, liberty and the pursuit of happiness. Political rights are therefore derived from these inherent and inalienable rights.

Equal right to life implies equal access to the means of living. Men make their living by work,—by industry. Where an individual can use the means of living only by the consent of another, or where his activity in making a living is controlled by another, the security of his life depends upon the will of that other. Obviously men do not possess the right to pursue happiness if they are deprived of the means of living or the right to industrial liberty. So that the right to life, liberty and the pursuit of happiness necessarily includes the equal right of all individuals to industrial liberty and equal protection to all in the disposal or enjoyment of the fruits of their own labor. This is industrial democracy.

That this was the meaning given to the Declaration by the people in making their State constitutions, and by the courts in interpreting those constitutions is shown in the following citations.

In the Massachusetts Bill of Rights we find:

"First. Government is instituted for the common good, for the protection, safety, prosperity and happiness of the people, and not for the honor or profit of any man, family or class of men.

"Second. No man, corporation or group of men shall have any

other title to receive compensation from the public than that which is measured by the value of the services which they render to the public.

"Third. The prime purpose of government is to give security to life, liberty and the enjoyment by the people of the gains of their own industry."

There are similar provisions in the constitutions of other States and in the federal Constitution. In all, the fundamental rights of the people are defined in social or industrial terms, and the purpose of government is derived from these rights.

Likewise in the interpretation of the constitutions by the courts we find:

Mr. Justice Mathews, of the Supreme Court of the United States, in 118, U. S. 356:

"When we consider the theory of our institutions of government, the principles on which they are supposed to rest, and review the history of their development, we are constrained to conclude that they do not mean to leave room for the play and action of arbitrary power. . . . The fundamental right to life, liberty and the pursuit of happiness, considered as individual possessions, are secured by those maxims of Constitutional law which are the monuments of the victorious progress of the race in securing to men the blessings of civilization under equal and just laws, so that, in the famous language of the Massachusetts Bill of Rights, the government of the Commonwealth may be 'a government of laws and not of men.' For the very idea that one man may be compelled to hold his life, *or the means of living, or the material right essential to the enjoyment of life,* at the mere will of another, seems to be intolerable in any country where freedom prevails, as being the essence of slavery itself."

And Mr. Justice Field, in Powell vs. Pennsylvania, 127, U. S. 678:

"By liberty is meant something more than freedom from physical restraint or imprisonment. It means freedom, not only to go wherever one may choose, but to do such things as he may judge best for his interests, not inconsistent with the equal rights of others; *that is, to follow such pursuits as may be best adapted to his faculties, and which will give him the highest enjoyment.* As said the court of appeals of New York, in People vs. Marx, 99 N. Y. 386: 'The term liberty, as protected by the Constitution, is not cramped into mere freedom from physical restraint of the person or the citizen, as by incarceration, but is to embrace the right of man *to be free in the enjoyment of the faculties with which he has been endowed by his Creator,* subject only to such restraints as are necessary for the common welfare.' And again, in the matter of Jacobs: 'Liberty, in the broad sense, as understood in this country, means the right not only of freedom from actual servitude, imprisonment or restraint, *but the right of one to use his faculties in all lawful ways, to live and work where he will, to earn his livelihood in any lawful calling, and to pursue any lawful trade or vocation.' 98, N. Y. 98.*

"With the gift of life there necessarily goes to everyone the right to do all such acts and to follow all such pursuits, not inconsistent with the equal rights of others, as may support life and add to the happiness of its posssessor. The right to pursue one's happiness is placed by the Declaration of Independence among the inalienable rights of man, with which all men are endowed, not by the grace of emperors or kings, or by force of legislative enactments, but by their Creator: and to secure them, not to grant them, governments are instituted among men."

In another opinion this great jurist says:

"As in our intercourses with our fellow men, certain principles of morality are supposed to exist, without which society would be impossible, so certain inherent and inalienable rights lie at the foundation of all governmental action, and upon them alone can free institutions be maintained. These inherent rights have never been more happily expressed than in the Declaration of Independ-

ence, the new evangel of liberty to the people: 'We hold these truths to be self-evident,' that is, so plain that their truth is recognized upon their very statement; 'that all men are endowed'—not by edicts of emperors, decrees of parliament or acts of Congress, but 'by their Creator'—'with certain inalienable rights'; that is, with rights which can not be bartered away, or given away, or taken away . . . and that 'among these rights are the rights to life, liberty and the pursuit of happiness; and to secure these rights' . . . not to grant them, but to secure them—'governments are instituted among men.'

"Among these inalienable rights, as proclaimed by this great document, is the right of men to pursue happiness, by which is meant the right to pursue *any lawful business or vocation, in any manner not inconsistent with the equal rights of others, which may increase their prosperity or develop their faculties,* so as to give them the highest enjoyment.

"The common business and employment of life, the ordinary trades and pursuits, which are innocuous in themselves and have been followed in all communities from time immemorial, must therefore be free in this country to all alike upon the same conditions. The right to pursue them, without let or hindrance . . . is a distinguishing privilege of citizens of the United States, and an essential element of that freedom which they claim as their inherent birthright.

"In this country it has seldom been held . . . that *an entire trade or business could be taken from citizens and vested in a single corporation;* such legislation has been regarded everywhere else as inconsistent with civil liberty. That exists only where every individual has the power to pursue his own happiness according to his own views, unrestrained except by just and equal laws. . . . I can not believe that what is termed in the Declaration of Independence a God-given and an inalienable right can thus ruthlessly be taken away from the citizen. . . . It can not be that a State may limit to a specified number of its citizens the right to practice law, the right to practice medicine, the right to preach the gospel, *or to pursue particular businesses or trades, and thus to parcel out to different parties the various vocations and callings of life."*

The parts of the above citations that we have italicized show:

That the courts, including the highest court in the land, have recognized the applicability of the principles of democracy to all the relations of individuals as members of human society, including industrial relations;

That industrial rights are "inherent and inalienable"—that they are not created by government and can not be taken away by government;

That governments are instituted for the securing of the inherent and inalienable rights of individuals, among which are included industrial rights;

That our political system is based upon the fundamental princples of democracy; that it is a system in which the equal rights of all are secured and protected by the sovereignty in which all individuals participate.

If industrial rights can not be taken away or restricted by government it would be absurd to say that they can be taken away or restricted by any individual, class or corporation. If our Constitutions mean to protect the industrial rights of citizens from infringement by the government instituted by the people, they must mean to protect them against the usurped power of industrial and financial monopoly.

The only restriction upon the industrial liberty of the individual that government may rightly make is such as may be necessary to the protection of the equal liberty of all. This is not the deprivation of a right, but only a regulation in the interest of its equal enjoyment. If the people will not allow their own governments to take away a single right of any individual for any purpose, how can they entrust all their industrial rights to a power over which they have no control? By what warrant do private corporate interests deny to individuals, or to free and law-

ful associations of individuals, the right to pursue any employment they choose for the sustenance of their lives, when the state itself may not exercise such power. The people themselves, in their sovereign capacity, may not infringe upon any industrial right of any individual: yet industrial monopoly assumes to determine how the resources, facilities and productive organization by which the lives of the people are supported shall be distributed and employed—how and when and under what conditions the people shall work, and what they shall receive for their labor.

During the last two years supporters of industrial and financial monopoly—the "capitalistic" system—have boldly advanced the claim that business should be a law unto itself. The financial press demands that "business" be left free to determine its own policies and to make its own rules. "Less government in business and more business in government" seems to mean the subversion of government to the will of those who control business, in all matters relating to business interests, and the complete immunity of business from government control in all matters arising between great privileged corporate interests and the people at large.

These claims are rested, not upon the fundamental principles embodied in our constitutions, but upon the assumption of superior industrial efficiency, wisdom and good intention on the part of those who shape the policies of "business"—that is, of industrial and financial monopoly. They assert that they have the economic interests of the people at heart and that they alone know how to serve them. The bankers say that they will "take care of the farmers"; the big industrial and financial corporations maintain that they are protecting and promoting the interests of "independent" business; financial and business interests demand the open shop in American industry, for

the professed purpose of protecting the right of the individual worker to dispose as he pleases of his own labor, though it is plain that all the great corporate employing interests are united in a policy to reduce wages and, in their own words, to "bring labor to its knees."

It hardly need be pointed out that the attitude assumed by corporate business is wholly antagonistic to the principles set forth in the Declaration of Independence, embodied in our constitutions and upheld by our courts. Even if every claim to superior efficiency were allowed, and even if the good intentions of industrial monopoly were beyond question, would we wish to barter our liberties for material prosperity? Would farmers consent to have their credit doled out to them by a financial monopoly, and their markets rigged by profiteers and speculators in order that they might be assured of profits on their investments? Would wage-earners settle down passively into soft jobs, held at the mercy of a system in the control of which they had no part? Would the people be content to deliver over their mines, their forests, their water-power, their railroads and their markets, in perpetuity, to interests that repudiate the principles of industrial justice, and that boldly and frankly claim immunity from the control of their governments, and depend for their very means of existence upon the wisdom, the honesty and the generosity of the men who direct those interests?

No true lover of freedom will hesitate to answer these questions in the negative. But if we will not barter our liberties for material prosperity, what claim to our support can industrial autocracy advance, if it fails to make good in economic efficiency? It has failed, as autocracy of every kind has failed, in every country and in every age; and autocracy confesses its failure. Even in the United States, with all the advantages of abundant natural resources,

superior skill, initiative and energy, and immunity from the ravages of war, industrial autocracy could not prevent, during the period following the war, unemployment, waste, poverty, suffering and death, far greater than were suffered by the people on account of the war itself. It could not even hold the economic advantages that came to us as an incident of the war. Its selfishness and its lack of constructive policy and leadership during the years following the war have involved the nation in economic losses that total more than double the cost of the war, including all the direct and indirect losses incident thereto.

The growth of industrial democracy in America is the most hopeful development of modern civilization. It represents the fullest fruition of the progress of mankind. Throughout the civilized world, democratic institutions are menaced by industrial and financial monopoly based upon the abuse of special privilege. It is the world-old struggle between democracy and autocracy, with the forces of autocracy taking their final stand upon the control of the resources, facilities and organization by which the very lives of the people are supported.

The salvation of the country lies in an immediate return to those principles upon which the American nation is founded and that must of necessity govern all the relations of men to each other, whether in politics, in social life or in their industrial affairs. The establishment of American industry on a basis of justice and efficiency, in accordance with the principles of democracy, is a duty that we owe to ourselves, our posterity and to humanity at large.

IV

THE GROWING TREND TOWARDS INDUSTRIAL DEMOCRACY

It has been lately assumed that industrial democracy is a new concept in this country. While it is true that the term "industrial democracy" as distinguished from political democracy has not until late years been widely used, it is not because the people have believed that the principles upon which American democracy is founded are not broad enough, fundamental and vital enough to govern all our interests and activities. If the people have not, heretofore, been interested in industrial democracy—if they have not demanded it in specific terms—it is because they have assumed that their political institutions—their governments—would protect their industrial and economic rights, as being included among those inherent and inalienable rights for the securing of which governments are instituted among men. The distinction which the people now make between industrial democracy and political democracy is an evidence of their sense of the failure of their governments to secure for them their industrial rights and to promote their economic welfare.

Our experience in the war had for a time greatly strengthened the belief in and the demand for industrial democracy among all industrial interests comprising the great majority of the people. There had been a growing demand for more democracy in industry before the war; and this demand was justified and strengthened by the successful adoption, under the stress of war necessity and under the inspiration of patriotism, of more democratic

methods in industry. The net industrial result of the war was a tremendous gain in efficiency, represented by increased production amounting to many billions of dollars, notwithstanding a great shortage in man-power, and notwithstanding serious disturbances to industrial organizations due to war emergencies. There were many who felt that these gains to democracy should not be sacrificed, and that they who gave their lives to "make the world safe for democracy" should not have died in vain.

The continued and increasing fear of radicalism also strengthened the tendency towards industrial democracy. Europe had been reduced to a state of industrial chaos and anarchy, on account of the collapse of political and industrial autocracy. Socialists, communists and radicals lacking experience in the direction of affairs, lacking a constructive policy, subject to attack by deposed autocrats, and sabotaged by such as remain in power, have not been able to repair war losses and to restore industrial sanity. As has been the case after every great social upheaval due to the oppression, the inefficiency or the stupidity of autocracy, "radicalism" has been held responsible. We still find it difficult to rid our minds of the feeling that there is a sanction for the acts of autocracy that does not attach to the acts of radicalism. Such is the tyranny of authority. Yet it must be admitted that radicalism is often lacking in constructive policy; and without constructive policy radicalism is a real menace. Probably the majority of the American people admit the existence of the wrongs of which radicals complain, but they doubt the ability of radicals to cure them.

Fear of destructive radicalism has in a greater or a less degree affected the minds of all the industrial classes in America. While it is most strongly manifested by those who have the greatest stake in existing industrial monopoly,

it has had an important part in the shaping of the thought and action of labor and farmer organizations, and of civic and economic bodies representing the public. Reactionaries have capitalized this fear for the purpose of discrediting all movements in the direction of industrial democracy. The "capitalistic press" has persistently suppressed news favorable to radicalism in Europe, while playing up in the most lurid colors everything to its disadvantage. Fake bomb plots, conspiracies and intrigues against our government, originating in the fertile imaginations of copy hunters, or deliberately "framed" by unscrupulous and mercenary detective agencies, have for weeks been given front-page space, and then dropped without comment or explanation when proof of their falsity was produced. It is only natural that the fear of radicalism should at times have bordered on hysteria. Yet, though the danger of destructive radicalism in this country has been tremendously exaggerated, there can hardly be any doubt that it is a real menace. Its triumph means revolution, whether that is the aim of radicals or not, because the fears of conservatives, skillfully played upon by special privileges, would impel them to resist rule by radicals, however reasonable and just it might be. The triumph of such radicalism means revolution; and revolution under conditions unfavorable to a constructive and just reorganization of society, either politically or industrially.

The history of the Old World during the last several years should leave no doubt concerning the reality and the seriousness of the menace of destructive radicalism which is admitted even by intelligent and fair-minded conservatives to be the natural and inevitable reaction from oppressive autocracy. So that all classes in America are coming to believe that the one safe-guard against destructive radicalism is to be found in industrial democracy.

While radicalism has shown its lack of constructive policy, privileged monopoly can not and will not supply a plan or a policy of industrial coöperation, because that would mean the loss of its privileges, and the reorganization of industry on a basis strange to its methods and antagonistic to its purposes. Industrial monopoly could not, if it would, take the step that would mean the loss of its dictatorship over industry. It has had no experience in, no training for, nor any inclination towards any other method of conducting industrial and business affairs than that under which each interest takes all it can get, and yields only what it must. Yet it confesses that industry can not be made permanently prosperous except on a basis of coöperation; and in this it recognizes the fundamental element in the present industrial problem. Individualistic industry, with "free competition," has given place to corporate industry, with competition largely eliminated. The corporation is a form of coöperation; but the present system of corporate industry has developed in such a way that it can not, without reorganization, bring all industrial interests into harmonious coöperation. It involves internal conflicts that are self-destructive; and it can not reconcile those conflicts. It can not even produce the coöperation necessary to the carrying out of its own purposes, to say nothing of the proper functioning of industry in the interests of the nation as a whole.

Therefore, any constructive plan for effective coöperation among the several industrial interests must come from some other quarter than the great industrial and financial corporations that thus far have assumed and have been yielded the place of leadership in our industrial affairs. We must look for constructive thought and action to "independent" business, to agriculture and to labor.

Definite and constructive proposals for the reorganiza-

tion of industry in accordance with the principles of democracy have been made during and since the war, in England, in the English colonies and in the United States. In all these countries the initiative has been taken by agricultural or labor interests, and their proposals have received the support of the more liberal elements of the people, and have been uniformly opposed by privileged monopolies.

In the United States, a promising beginning has been made in the organization of banks, manufacturies and marketing facilities on a more democratic basis. But most important of all, organized labor in the United States has recognized the futility and destructiveness of further industrial warfare between employees and employers, and has brought forward a plan for the complete reorganization of industry on a democratic basis. This plan was worked out by Glenn E. Plumb, and was first proposed by the railroad labor organizations for the operation of our national transportation system. It was afterwards enlarged by its author to include all corporate industry. The railroad plan was endorsed by the American Federation of Labor, at its annual conventions in 1919 and 1920; and the plan for industries organized under corporate grants from the public was endorsed by the convention of 1921.[1]

The plan endorsed by the American federation proposes that national railroads, which are a necessary service to all the industries of the people, shall be owned by the Federal government and operated by those responsible for their efficiency. It proposes that in all industries organized as corporations, and having grants of power or privilege from the public, those who invest their labor shall share in control and management, and in the gains of the industries, in proportion to the value of the contribution of

[1] Report of proceedings of the convention of the A. F. of L., 1921. pp. 361–363, 371.

each, on an equal basis with the investors of capital. That is, that investors of labor shall have equal rights with investors of capital. It is evident that these proposals are in complete accord with the fundamental principles of American democracy, as set forth in the Declaration of Independence and in our constitutions, and as interpreted by our courts.

These plans for the democratic reorganization of industry are both practical and constructive. Supporters of industrial democracy do not propose to sacrifice the industrial interests, the prosperity and the happiness of the people to "inexorable economic law," that somehow is supposed by reactionaries to govern from without all our industrial activities; but they propose to readjust our economic policies in accordance with known and tested economic and social principles. On the other hand, they do not propose to scrap existing industrial organizations that for specific purposes have proven their worth; but they propose to reconstruct existing industry on a basis of justice and efficiency, so that it will perform its true function of supplying the economic wants of all the people. They do not propose to set up the power of a labor autocracy in opposition to the existing autocracy of capital; but they propose to establish industry on a basis of the free coöperation of all productive factors, so that all rights may be protected and the highest efficiency achieved.

In this advanced position, labor opinion in England is in agreement with that in this country; and in both countries there is valuable support from outside of labor circles for a policy that promises to bring to an end the strife between "capital" and labor that is so destructive of the industrial welfare of all the people. Labor leaders and liberal statesmen in England tell the workers that they should cease their efforts to install shop committees in the

various industries with no authority and little power to protect the interests of the workers, with the ever-present danger of conflict or interference to the detriment of the efficiency of industry, and should demand a just part in the direct management and control of the industry itself. This advice goes to the heart of the situation. It means industrial democracy. It means that in England, as in this country, the industrial warfare that has brought upon the people untold misery, is to be forever ended by the establishment of industry on a basis of free coöperation, in the interest of all the people.

V

ANALYSIS OF INDUSTRY

Industry Defined. Industry is that form of human activity by which wealth is produced. Wealth is anything that will satisfy human wants; and human wants arise out of the needs of individuals for the things that will sustain life and minister to its purposes. Wealth can be created only by the application of human energy to things and forces found in nature—natural resources. Energy so applied is called work. Human energy exists only in individuals. It consists in the intelligence, the skill and the physical power of individuals to adapt or to control natural forces for the protection and sustenance of their lives and the development of their purposes.

The Socialization of Industry. If every individual lived entirely from the products of his own industry, no industrial relations would arise; there would be no adjustments to be made among individuals; there would be no industrial system. But individuals are not and never have been wholly independent of each other. They have found it advantageous or necessary from the beginning to unite their efforts for production. Even under the most primitive conditions coöperation may be not only advantageous but unavoidable. When agriculture and manufacturing industry begin, division of labor is developed and exchange of products and services made necessary, thus still further stimulating and extending coöperative activities.

Furthermore, coöperation exists from the beginning of

human life, from the fact that life begins with the family. The family is supported by the joint labor of its working members. There is coöperation in the same task, when, for instance, two persons row a boat that is too heavy to be propelled by one alone; and there is differentiation, or division of labor, when one member of a family catches fish, another cleans them and still another cooks them. Within the family, the division of labor may be extended to the point where the several kinds of production are performed by separate individuals; where one is a fisherman, another a hunter, and a third makes weapons and tackle for the others. Thus, there would be a differentiation of individual labor within a single scheme of coöperation, the purpose of which is the support of the entire family.

In primitive times, the family expanded into a larger social unit—the clan, which included a number of closely related families. A number of clans formed a tribe; and a number of tribes were often held together by real or fictitious blood ties. Industrial coöperation was often extended and continued in the clan, the tribe or even throughout an entire confederation of tribes; the clan becoming the unit of local industrial control and management, and a general policy of industry and trade being determined in the councils of the tribe or the confederacy. Within the clan, the work of individuals was distributed by social authority, and the product of the labor of all was placed in a common storehouse, whence it was distributed to the several families according to the number of members in each.

Within the clan, production was in many instances placed upon an individual basis long before the practice of equal distribution was abandoned. Individuals were required to bring into the common storehouse, for the support of the entire community, their several quotas of meat, fish or

other supplies. In the earlier stages of the development of agriculture, each individual or group had its allotted task in the production of crops, which, when harvested, were likewise turned into the community storehouse and apportioned among the several families. But in course of time, land was allotted annually among the heads of families, each working his own allotment and retaining for the use of his family the entire product, except such portion as was taken for community purposes. There came to be similar allotments of other occupations and trades, among different clans, or among the several members of the same clan. Descendants of such individuals distributed among different tribes that had descended from a common stock often continued in the occupations of their ancestors; and where there was no common ancestry, clans or individuals were naturally drawn together by the fact of common or similar occupation, or by the exchange of products among individuals or groups of different occupations. Thus there arose forms of industrial coöperation that cut across tribal relations, and opened the way for the development of larger social and political units. This seems, in fact, to mark the transition from tribal to national life. These new unions were called brotherhoods, because of the fact or fiction of common ancestry. But they were really industrial unions. Out of them developed the industrial guilds and the agricultural village communities of the Middle Ages—those little understood industrial and social organizations that are now playing so important a part in the revolution in Russia and in the industrial reconstruction of Italy—and probably, through successive stages, the modern trades and labor unions, in the more highly developed industrial countries, as in England and the United States. From these primitive industrial unions

have developed all modern systems of coöperation, if not all social and political institutions.

The Function of Industry. Thus we find that industry, with regard to its function and final purpose, has always been coöperative. The sole function of the industry of any community, state or nation is the production of those things or the performance of those services that will satisfy the economic wants of its members or citizens. That industrial system is best which will most fully supply the wants of all. The primitive community probably required every individual, to the limit of his ability, to contribute to the common store of goods for the supplying of the wants of all. But it was found that, on the whole, those who contributed most, needed most to sustain their energies. It was also found that more goods were produced when the work was distributed according to the several abilities and preferences of individuals, and when responsibility for production was definitely placed. Finally, it was found that efficiency in production was developed and maintained in proportion as products were distributed according to the several contributions of individuals in their production. This is necessarily so, because the expenditure of energy in production is primarily an individual process, governed by individual motives and limited by individual needs; and because wants are the expression of individual needs. So that the complete discharge of the function of industry means the full satisfaction of the wants of all individuals, to the extent that it is possible with the natural resources available.

Supply and Demand. Thus the social purpose of industry is served by applying the labor of all individuals to the satisfaction of the wants of all individuals. The primitive group exacted the labor of its members for no other

purpose. There can be no other justification or excuse for any of the complex systems of industry that exist to-day. If industry were established on an exclusively individual basis, no one would produce except for the satisfaction of his wants. If he engaged in trade, it would be to acquire something produced by another which he thought would better serve his needs than the thing he offers in exchange, which is the product of his own labor. He could trade his surplus only if there were another individual who had the product he wanted, and who was willing to exchange his surplus for the product offered. Thus in every case it is the existence of an individual want that creates a demand for production. In individual or in coöperative industry, where the entire product is consumed by the individual or group that produced it, or where a part is exchanged for a product produced by another individual or group, production takes place only in response to a known human need for the thing produced. This need is expressed as economic demand. So that production is absolutely limited by demand. It increases as demand increases, and it fails when demand fails.

If every individual lived exclusively from the products of his own labor, there would be a direct and exact balance between supply and demand. If the individual could not produce enough to satisfy all his wants he would adjust his wants to what he could produce, and if he could produce more than enough he would cut down his production to the limit of his maximum consumption. He would do no more work than was necessary to the full satisfaction of all his wants.

But no one lives exclusively on the products of his own labor. Even where industry is largely on an individual basis, as in the case of agriculture, the tools and machinery used are produced in other industries; other services are

necessary for the carrying of the product to consumers; and the products of other industries are necessary to the full satisfaction of the wants of the farmer and his family. In most modern industry other than agriculture, production is accomplished by the coördination of all the factors of production in a single organization, and by a division of labor so highly specialized that each individual does only a small fraction of the work expended upon the finished product. And many products are required to supply the wants of a single individual. The purpose of industry as a whole is to supply the wants of all individuals; and the purpose of each individual is to supply his own wants. It follows that for either the social or the individual purpose of industry to be served, the whole of the joint product of coöperative industry must eventually in some way, be distributed back to individuals.

Effective Demand. How does the individual who contributes his labor to this highly complex system of production get out of it the things necessary to the satisfaction of his wants? He buys them with what he gets for his labor. In this complex system, as in any other, production is accomplished by the direct application of human effort—labor—to natural resources, aided by tools, machinery, facilities and organization, accumulated out of the results of past labor. The value of present labor expended in production is expressed in wages; the value of past labor is expressed in interest or profits. So that the total of wages, interest and profits measures the volume of products that all consumers may take out of industry. It limits the actual or effective demand for products that may be made at any given time.

Stated differently, wages, interest and profits represent the sum total of all demands upon production. Under the present economic system this total may be less than, equal

to or greater than the total production. The several claims may be disproportionate to the value of the several contributions to production; and they may likewise be disproportionate to the consuming capacity of the several individuals or groups receiving wages, interest or profits. Buying power in excess of the present requirements of its possessor is invested against further production. The total of these several claims upon the products of industry measures the total ability of all consumers to purchase the products of industry—their buying power. Under a just economic system, buying power will exactly equal total production; and will exactly correspond to the total of all the wants of all individuals; that is, if enough can be produced fully to satisfy the wants of all. If buying power is in excess of present production, the difference remains over as a charge upon future production. If effective buying power is less than present production, there will be a waste of consumable goods already produced, and future production will be cut down to correspond to effective buying power. If total buying power exactly equals production, but is so distributed that some individuals have more than enough for their present needs, others will have less than enough for their present needs, and the surplus in the hands of those who hold it will remain over as a charge on future production. The result will be "over-production" with regard to effective demand, but under-production with regard to potential demand, which is measured by the economic wants of all the people. Under these conditions, production will adjust itself to this limited effective demand; so that it will be less able to meet potential demand. At the same time there will be a hold-over of buying power that must be satisfied out of future production; and it must be satisfied out of a production that has been cut down by an amount equal to or greater than the amount of the

buying power held over, since goods will not be produced when there is no market for them.

There are still other ways in which the wrong distribution of buying power restricts production. Those who are able to buy more than they need are apt to spend a large part of the surplus in idle and luxurious living, thus impairing their productive energies. Those who have less than enough to meet their needs will suffer an even greater impairment of energy, because of undernutrition. In so far as the concentration of buying power is due to privilege, the incentive to efficiency will be weakened, in that many will be deprived of the just reward for their services. The normal desires of those who have too much will in time be weakened by satiety; and the desires of the undernourished will be atrophied by undersatisfaction and constant adjustment to lower standards of living. So that even potential demand will finally be adjusted to a production already scaled down to a limited effective demand. Thus there will take place a series of adjustments, of production to demand and of demand to lowered production, until the energies of the economic community are destroyed and there is no more production. Then comes the final industrial depression, from which there is no recovery.

Thus the maladjustment of buying power is the greatest danger that can threaten any industrial system. It constitutes the greatest menace to modern civilization. No civilization has endured, or can endure, that can not remove this danger. How can we remove this menace to our industrial system and to our civilization?

We must recognize, in the first place, that the consuming element in industry is of equal importance with the producing element, that the interest of every individual as a consumer is exactly equal to his interest as a producer. We must recognize, in the second place, that the buying power

of consumers is measured by their earnings. If buying power is distributed in proportion to the value contributed to production, effective demand will be equal to potential demand, and all the products of industry will be disposed of. There will be no limiting of production until it has satisfied all the needs of consumers; and when that happens producers will simply take a rest until consumption has caught up.

The period of industrial depression that followed the war was brought on by the accumulation of profits in the hands of a few, in excess of their ability to spend them, to the detriment of the earnings of the many. We shall proceed to show that such accumulation of profits must necessarily result from the overemphasis of certain factors in production, and the corresponding neglect of others; and from the granting of privilege to certain industrial interests at the expense of the rights of all other interests. To this end, it will be necessary first to analyze the several factors in production, and to distinguish the different interests in industry.

Factors in Production. We have shown that all production is accomplished by the application of human energy to natural resources. Energy so expended is called work, or labor. But production can be effectively carried on only by the use of tools, machinery and facilities, and by the coördination of all the elements entering into production for the accomplishment of definitely conceived ends. Tools, machinery and facilities are created by labor, as truly as goods consumed in the satisfaction of wants are created by labor. Organization is also a product of human energy, and therefore a creation of labor. Any effective organization of industry as a whole will provide for a policy which shall define the general course that is to be taken by all the industries of the nation, in accordance with the

fundamental principles governing industrial activities, to the end that the economic wants of all shall be in the fullest possible measure supplied. It will provide for the organization of separate industrial enterprises in accordance with those principles and in conformity with that general policy. This means that under the general policy adopted for all industry, some person or persons must take the initiative in each separate industrial enterprise; must survey and define the field it is to occupy; estimate the extent and possibilities of the market for its products; assemble the labor and the material facilities for the carrying out of the enterprise; and build up an effective internal organization. This we may distinguish as the function of management, and therefore we may, for purpose of classification, separate management from labor, as a factor in production; though, in the broadest sense, it comes within our definition of labor. Capital, consisting of the accumulated products of past labor, may advantageously be regarded as a separate factor in production, apart from labor and management. This classification has the special advantage of conforming to accepted economic conceptions and to the prevailing popular usage of economic terms. We shall therefore proceed to analyze these three factors in production, giving a chapter to each and beginning with labor, which is the most fundamental and important.

VI

THE FUNCTION OF LABOR IN PRODUCTION

WE have defined labor as human energy applied to natural resources in order to produce the things necessary to supply human wants. We have shown that only by such applications of human energy can wants be satisfied, and that there is no other purpose for its expenditure than the satisfaction of wants. Human energy exists only in individuals, and therefore labor can be performed only by individuals. Society has no means of support other than the work of its individual members. But the efforts of individuals in production may be exerted separately for the accomplishment of separate ends, or coöperatively, for the achievement of a common end. Labor carried on individually and for distinct individual ends is wholly self-directed. The labor of an individual coördinated with the labor of other individuals, for the accomplishment of a common economic end, may be wholly self-directed within the limits of the individual job, but is controlled with regard to the common end; and the job itself may need to be directed by a foreman, responsible to a superintendent, who is in turn responsible to a manager. The entire management of a particular industry may be controlled by a general policy that includes a group of related industries; and the entire industrial system ought to be controlled in accordance with a policy designed to secure the equal rights of all individuals, and the fullest possible discharge of the function of industry in supplying the economic wants of all the people.

Labor, as differentiated from the direction, supervision, management and control of industry, is the direct application of human energy to a particular part or process of production. Anyone who contributes in any way to production is performing labor. The foreman, the superintendent, the general manager or the president of a railroad works at his job, as does a locomotive engineer, a brakeman, a section hand or a water boy. The job of each is subject to control, management, direction or supervision, in so far as necessary properly and effectively to coördinate the work of all for the achievement of the common purpose for which the industry is organized. In their relation to each other, labor is the doing of a particular job, and management is the correlation of that particular job with all other jobs that are parts of the same industry.

So that the controlling, organizing and directing function of industry is not discharged by a separate class of individuals from those who do the work of production. Every person having to do with the management of an industry is a laborer, with regard to his particular job; and every job is to some extent self-directed. Some work is entirely so, even under the most highly differentiated system of production. When a man grows potatoes in his own garden, by his own labor, he discharges the entire directive function in such production. The activities of the work of every housewife, doing her own work, are self-organized and self-directed. Even in the most highly organized factory production, every worker to some extent organizes and directs his own efforts; otherwise his work would be completely automatic, and could be better done by a machine. There is in every worker a brain behind the hand; and in all skilled employment the directing brain and the coördination of nerve and muscle controlled by it are far more important than the mere physical energy employed. A complete in-

dustrial organization is, or shouuld be, a complete coördination of the self-directive capabilities of all the workers engaged. There is no other way. The physical energies of separate individuals can not be coördinated for the achievement of a common purpose, except through the individual brains of the men who do the work.

Thus, the controlling, managing and directing function runs through the entire organization and is shared by all who contribute their efforts to production. It can not be exclusively shifted to or usurped by any individual or class. Thus there is a differentiation of the function of control and management on the one hand, and applied labor on the other; some of the coöperators being more concerned with directive activities, and others more with the separate and specialized tasks of production. The physical function is also divided; and this carries with it a corresponding differentiation of mental function. What we have, then, in nearly every modern industry, is a number of individual workers applying their mental and physical energies to different parts of a single scheme of production, under a control, administration and system of management whose function it is to coördinate the efforts of all to the achievement of a single end. The distinction between labor and management is a distinction of function; not a distinction between classes of persons engaged in production. Every job is in some degree self-managed, and every manager works at his job, which must be directed and controlled in accordance with the requirements of the organization as a whole equally with the job of any laborer who is not concerned with the direction of the activities of others. Nor can any hard and fast lines be drawn between the mental and physical functions in production. There is no work in which some degree of mentality is not required; nor is

there any controlling or directive activity that does not involve some expenditure of physical energy.

Under an efficient system of industrial organization, labor becomes increasingly self-directive. The more efficient the individual worker becomes, the less he is in need of supervision. Often the rules, customs and general morale of an industrial establishment are sufficient to secure the highest degree of diligence and efficiency on the part of individual workers, without any great amount of personal supervision; and supervision takes more and more the form of consultation, advice and technical direction. It is well understood that the best type of industrial organization tends constantly in this direction. That is, it increases the intellectual function on the part of those who do the physical work of production, and correspondingly decreases the need for external supervision, direction, management or control.

So that the relation of individuals in production becomes increasingly a relation of coördination, rather than a relation of subordination. This does not mean that there is not, or should not be authority; nor that authority should not sometimes be absolute. But it does mean that final authority with regard to everything can not be lodged in any one individual or class of individuals. Plainly, it precludes any assumption of superiority by any person merely because he directs the activities of others. The janitor of the building in which my office is located may very properly direct my activities with regard to certain rules which he is empowered to enforce, and which are necessary to provide for the comfort and to protect the rights of all the occupants of the building. The superintendent of an industrial plant often has the general direction of specialists of much greater mental ability than he possesses. In fact, in a well

managed industry, the superintendent holds his position, not because he is in all things superior to those whose activities he directs; but because he has, or is presumed to have, superior ability to do just the thing he is doing.

So general and persistent are the misconceptions of the relative dignity, importance or worthiness of different kinds of ability, that it will not be unprofitable to give the matter further illustration. The primitive idea that "the common herd" must be under the direction and authority of a superior person or class of persons dies hard, though the weight of modern experience is against it. In earlier times, where aristocracy or military autocracy had become dominant, all industrial activity was regarded as degrading—fit only for slaves. Now we make distinctions between different kinds of industrial activity, and claim superior dignity and value, and a greater reward, for certain kinds. In general, distinctions are drawn in two places—between mental and physical activities, and between management and labor; it being assumed that management requires the superior intelligence. Certain economists and "business experts" have even attempted a distinction between work and labor. "The ox labors," says a recent editorial in a leading financial journal, "but he does not work." "The man who is just now cleaning my office windows is performing labor, but the designer of the building in which my office is located did creative work." "I am writing a newspaper article, which requires mental training, and involves my expenditure of mental effort; my employment may therefore be dignified by the name of work, while my window-washer is only doing labor." "God looked upon his work, and saw that it was good." So runs the argument; the implication being that the editor and the architect are to be classed with God, and the window-washer with the beast of burden. But what essen-

tial difference is there? It is undoubtedly true that if the average window-washer tried to write an editorial on an economic subject, he would make a mess of it—but so, for that matter, did the editor; and, on the other hand, if the editor tried to wash the outside of a window on the twentieth floor of a modern skyscraper, he would not only make a poor job of it, but would probably break his neck. Why could not the editor wash windows? Simply because he lacked the kind of training and the particular ability to coördinate brain and muscle necessary to the successful performance of that kind of work. That is the reason, and the only reason, why the window-washer could not write editorials.

While the control and management of industry does not require an intelligence superior to that of the men who do the specialized work of production, it does give to those exercising it an important advantage over the man on the job. The latter is tied to his particular employment, while the man who has a part in management or control may find many opportunities for shaping things to his advantage. He may exploit the superior skill, inventiveness or energy of those under his direction for his own advancement or profit. Owing to this position of advantage, those who have most to do with control and management may band together for the exploitation of labor, capital or consumers. They may, and to a great extent do, capitalize for their own profit labor, the facilities that labor has produced, and the needs of the people. This is not exploitation of labor by capital. It is not a domination of a class of inferiors by a class of superiors. It is the exploitation of a part of the people engaged in industry by another part of the people engaged in industry, through the abuse of a power that the necessities of production have placed in their hands.

This exploitation is largely due to the fact that the

majority of the people admit the claims to superiority of those who control industry. Labor is degraded, largely because we have become accustomed to think of labor as inferior. We have become accustomed to think of labor as something degrading to him who must live by it; as something to be avoided if possible; as something that is entitled to wages and nothing else; and that is not to have a voice even in the determination of the wages that it shall receive. But, as we have shown, labor includes all forms of human effort, mental or physical, expended in human service. The technical ability of the designer of a skyscraper, and the agility, strength and skill of the men who hoist a steel girder and rivet it into place; the mental effort and the organizing ability of the president of a great railway system, and the sureness and reliability of a locomotive engineer—all are services in production; all are forms of labor. Though some employments require more physical and others more mental effort, mind can not be separated from muscle in the work of production. There is no such thing as pure mental effort that does not find expression in physical activity. There is no such thing as physical activity that is not directed by the master mind. The unthinking worker is an automaton—a machine; and no matter how intricate and delicately adjusted a machine may be, how near it may approach to self-control and operation, unless it is controlled by human intelligence, it is merely dead matter. The machine is created by human intelligence and skill, and serves human purposes. It is only a complicated tool, which, without the direction of a human hand, controlled by a human brain, is as worthless as though the metal of which it is made still lay hidden in the mine.

We can not endow a machine with the creative ability that directs the efforts of the man. On the other hand, if

the human worker is reduced to such a state of subordination and subservience that he is a mere automaton, he is apt to be even less efficient than a machine. For the machine is exactly designed for its purposes, and may be brought wholly within the control of its operator; while the human automaton, as long as a spark of intelligence or human feeling is left in him, may at any time break out of control. The energies of such a worker can not be maintained, because the controlling motive has been destroyed. When he fails to discharge the automatic function assigned to him, he can not be repaired as a machine can be repaired. There is no place in modern industry for unintelligent labor. In so far as there ever was such need, it has been supplied by machines.

Thus, labor is the creative element in production. It is even more than this. In so far as any human purpose is definitely conceived, and effort for the achievement of that purpose is consciously expended, that effort is work—it is labor. Labor is therefore the creative force in carrying out all the purposes of human life; it is the creative and constructive force in life itself. It is the essential quality of life. It is the divine element in the human mind. This sublime conception of labor has been set forth in the biblical story of creation, in words that live through all the ages. "God created the world, and saw that it was good." He then created man and placed him upon the earth. There God's work ceased. God did not provide for the support of the life of man, but gave him the means for supporting his own life. He provided materials. He endowed man with physical energy, and planted in his soul a portion of the Divine creative fire, that should enable its possessor to transform the dead matter of creation and to adapt it to human uses. Nothing in nature is of any use in the support of life or the carrying on of its purposes until

it is so transformed. Of all the things that the earth supplies—the mountains and the seas, the fields and the forests, the trees and the fruits thereof—not one single thing will serve any human purpose unless fashioned to that end, by human effort, directed by human intelligence.

The creative ability of man springs from an even deeper source than mere intellect. It arises out of the depths of the human soul. Intelligence is directed by motive. Motives are formed in that inner sanctuary of the soul, where reside those instincts, institutions and aspirations that express the real and final purpose of living. Opportunities and facilities for the free development of these instincts, intuitions and aspirations are among the wants to be supplied by the efforts of labor; and the development of these qualities is essential to the efficient discharge of the function of labor. The preservation and development of the creative instinct is essential to the support of life; and at the same time it is the final purpose of living. It is the beginning and the end of life.

This does not mean that life should be all work, in the narrower sense. Much less does it mean that work should be always a burden. Drudgery is fatal to efficiency as it is destructive of human happiness. On the other hand, the free exercise of the creative instinct is one of the greatest sources of happiness. Leisure is necessary for the cultivation of the qualities that make for industrial efficiency, as it is necessary for the development and exercise of the mental, moral, and spiritual qualities that make for the full enjoyment of happiness. Leisure is essential for the progress of human society and the development of civilization; but it must be leisure for those whose creative work sustains progress; not leisure for a favored class living in idleness and luxury. Moral ideas grow largely out of industrial activities. Art is the direct outgrowth of industry.

The spiritual life itself is but the full development of that same creative power that is the chief factor in production and that we call work. All human ideals grow out of the practical striving of men to better the conditions under which they live. Therefore, all systems of morality, art, religion and culture are the product of that same force that is the chief factor in industrial production.

The industrial system is the product of labor. Industrial organization is the product of labor; and capital is created by labor. To say that labor is of less importance than organization or capital, is to say that it is of less importance than that which it has created, and which is of no value except as it is used by labor in production. When we say that capital oppresses labor, we are talking metaphorically. What is meant is that those who control capital oppress those who use it in the work of production. It is one human interest in industry dealing unjustly with another. It is the use of a power created by labor for the oppression of labor. When those who control capital oppress labor, they use labor to do it. We have seen that natural resources can not be utilized without labor. We have seen that tools, machinery, facilities and organization are merely the means by which labor accomplishes production. On the other hand, there can be no production without the use of natural resources, facilities and organization. So that they who control material capital and industrial organization hold the power of life and death over their fellow men. They can thereby suppress or turn to their own purposes that creative instinct that constitutes the very essence of life in the human soul.

It is, therefore, of the utmost importance that the true function of capital in production be exactly defined, so that it may be used in industry to the greatest possible advantage; and in order to prevent the capital interest from

usurping the functions of other industrial interests, or appropriating to itself the rewards that belong to labor or to management. This will be the purpose of the next chapter.

VII

THE FUNCTION OF CAPITAL IN PRODUCTION

What is Capital? We have become accustomed to think of capital exclusively in material terms or in terms of money. This is in part due to the teachings of economic science, but chiefly to the fact that the possession or control of material wealth is so largely the determining factor in present-day industrial relations. The older economists nearly always defined capital as a part of existing material wealth. According to Adam Smith, it is "that part of a man's property on which he expects a return." John Stuart Mill defined it as being "wealth consumed by labor while it is engaged in producing more wealth." Most modern economists regard capital as being that portion of wealth that is saved from consumption and is available for use in further production.

All of these definitions are in part correct; but none of them includes all the elements of capital. It is evident that Adam Smith's definition merely describes an incident of capital. It is useless in determining its place in production. Mill's definition comes nearer to being adequate, especially if the term "wealth" is taken to include organization and facilities as well as supplies and material equipment. Likewise, modern definitions are sufficiently comprehensive, if we mean by the term "wealth" everything that in any way facilitates the application of human energy to the purpose of production, and if we mean by "saved" the accumulation in any manner of materials or human energy

that may be used in production. "Wealth" will then include inventions, processes, devices and organization, as well as material goods and facilities. And it will include the adaptation of production to the demand for products; that is, the proper adjustment of the scheme of industry to the accomplishment of its true purpose—the supplying of the economic wants of the people.

But modern definitions of capital are misleading, in that they set capital over against products consumed. They overemphasize saving out of consumption, making it appear that capital can be accumulated only by self-denial, when the truth is, as we shall show later, that saving out of what is desired or needed for immediate consumption is only one way of accumulating capital, and probably not the principal way. Most definitions of capital also imply that all that is saved out of consumption is an addition to capital; while the truth is that goods may be saved out of present consumption that are of no use whatsoever in further production; and that therefore have no value as capital, either because they are of such a nature that they can not be so used, or because there is already a sufficient supply.

The Function of Capital. Though we habitually think of capital in material terms, at the same time we talk of it as though it performed an active function in production. We conceive of capital as being the dominant force that shapes the industrial policy and determines the management of industrial enterprises. This is clearly contradictory to the material conception of capital. Material capital, in and of itself, is not a force; it is merely dead matter. Material capital—tools, machinery, plant, equipment, or supplies—can not function. Function is active: capital so defined is passive. In the more technical sense of the term, function refers to the activity of an organ with regaid to the purposes of an organism of which the

particular organ is a subordinte part. The function of the heart is to pump blood through the circulatory system of a living organism; but both the heart and the lungs are active parts of the organism, their action being coördinated with the action of all other organs.

This is not true of material capital, even though it consists of tools, machinery, plant and facilities absolutely necessary to effective production. None of these are self-operative. There is no possibility of a self-coördination among them for the accomplishment of a common end. It is not even conceivable they should have an end, or, if they had, that it would bear any relation to human uses or purposes.

Though material facilities, like natural resources, are indispensable for use in production, in and of themselves they have nothing whatsoever to do with production. Without human thought and action, all natural resources would remain forever dormant. The fertility of the soil would still be there; trees would still be growing in the forests; coal and iron would still lie beneath the surface of the earth; the forces of gravity would still operate; electrical energy would be undiminished; but without the human conception of wants to be satisfied, and the actual expenditure of human energy to the accomplishment of the desired end, there would never be a pound of food produced, a ton of ore molded into steel, a foot of timber fashioned to human uses, or any natural force or energy harnessed for the satisfaction of the wants or the achievement of the purposes of man. So it is with material capital—tools, machinery, plant and facilities. Their sole value in industry consists in their use by human beings in the production of the things that will satisfy their wants.

Functions of Capital as Human Activity. It will be necessary then to distinguish between capital as consisting

of material things and that larger and more important element in capital which is represented in the accumulated ability of human beings to use material things for the accomplishment of their purposes. In the course of their experience men have discovered the existence of certain natural forces and a certain uniformity in their operation. They have found that they must make certain adaptions to these forces in order to live at all. And they have further found that by shaping their activities in certain ways, the conditions of living may be vastly improved. They have found that forces in nature may be directed or controlled so as to make living easier or more enjoyable. The activities by which this is accomplished are called work. Work is primarily a physical process: it is the expenditure of the physical energy of the individual for purposes of production. But physical activities are directed by individual intelligence. Where work is done in coöperation, there is agreement, in one form or another as to the end and the method by which it is to be reached. Division of labor is achieved. Inventions, devices, tools and facilities, fashioned by the labor of individuals, working separately or in coöperation, are used for the furthering of the work in hand. The sum total of such inventions, devices, tools and facilities existing at any time constitutes the material capital of the coöperative group—of the economic community.

Material capital is, then, the sum total of natural objects or forces that at any time have been modified, coördinated or saved for use in production. In the discussion of the function of capital, we are concerned with the question of how these material facilities are created, conserved and used for the purposes of production; not how they themselves function in production. It is a question of policy and method in the application of labor; not a question of the control of labor by capital, or of capital by labor.

Capital Defined. We are now in a position to give a definition of capital that will include both its active and its passive elements. During the war, Mr. C. W. Barron, then of the editorial staff of the *Wall Street Journal,* and later editor of *Barron's Weekly,* defined capital as being "our total ability to produce." In explaining this definition, Mr. Barron laid the emphasis strongly upon individual energy, skill, inventiveness and industry, and upon wise direction and effective organization. He showed that material things, in and of themselves, perform no function in production; that material capital is only the means by which individuals, organized into an industrial community, produce the things that will satisfy their economic wants.

This is an unusually broad and liberal conception of capital, and has special significance coming from "capitalistic" sources. Its application to economic theory and to business practice would go far towards ending forever the domination of industry by those who own or control material wealth. The only trouble with this definition is that it does not distinguish between labor and material capital as factors in production. It includes them both, and in such a way that all capital seems to be absorbed in labor, and therefore eliminated as a distinct factor in production. But while capital as an active element in production consists of human energy and intelligence that may be used in production, we may advantageously distinguish between energy so expended at any given time, and the total of accumulated energy, inventiveness, skill and organizing and directing ability that may at any time be applied to production. We create and accumulate ability to produce; and this ability exists as inventiveness, skill, organizing ability and physical energy, on the human side, and as developed resources, tools, machinery, plant and facilities on the material side.

We may, therefore, define capital as consisting of all the facilities, both human and material, that at any time are available for use in, or that may be applied to production. This definition includes both the human and the material elements of capital; both its active and its passive factors. Capital functions in production through the active, not through the passive factor.

To be entirely accurate, however, we should speak of the capital function in production, rather than the function of capital in production. The capital function, exercised by those who organize, direct and manage industry, is to bring together and organize resources, facilities and labor for production. In its passive aspect, capital consists of anything and everything that may be used in or applied to production. It is that portion of created and accumulated wealth that is applied to the production of more wealth.

But wealth, whether employed as capital or consumed in the present satisfaction of wants, includes much more than material things. It includes the ability to perform any kind of service that will minister directly to human needs, or that will contribute to the production of the things or services that will minister to human needs. The waiter who serves us at table; the taxi driver who drives us to the station; the porter who carries our bags; the scrub woman who cleans the house or office; the man who delivers the milk; the teacher who instructs our children; the reporter who gathers the news; and the boy who delivers the daily papers at our doors—each and every one of these is a producer of wealth and his services are a part of wealth. And the services of any one may be applied to the direct satisfaction of wants or coördinated for use as capital, or both at the same time.

Where labor, directive ability, material resources, tools,

machinery, buildings, selling arrangements and markets are organized into an industrial or commercial system, the organization itself is capital. The whole, as a system, is much more effective for production than are the parts operating by themselves. The difference is the measure of the capital value of the organization as such. The Coöperative Wholesale Society of Denmark adds tremendously to the ability of its members to produce and deliver butter, eggs, poultry and bacon to those who desire to purchase them. It is a facility in production, the value of which is measured by the difference between the average cost of production and delivery before it was organized, and the average cost under its operation. The farmers' coöperatives in the United States economize the handling and selling of farm products. They effect a saving for their members. Therefore they have a capital value, as organizations, that is exactly measured by the saving effected. The Brotherhood of Locomotive Engineers' Coöperative Bank, at Cleveland, has distributed hundreds of thousands of dollars in dividends to its depositors, in excess of the interest paid on their deposits. These dividends measure the value to its depositors of the bank as an organization. Before the bank was organized, they received only the current rate of interest on their deposits. The United States Steel Corporation, as an organization, has been a source of enormous profit to its stockholders and to those who control it. Chain stores are organized to improve service, to reduce costs and to increase profits. The difference between the average earnings of a chain of stores and the amount any one store could earn if operated by itself, measures the capital value of the chain, as an organization. It measures the value of that particular facility for production—its capital value.

The mutual relation of interdependence among different

industrial enterprises is capital. Developed trade is capital; organized markets are capital. The successful adjustment of production to the needs of consumers is the highest form of capital.

The energy and skill of the worker, the knowledge of the technician, the organizing ability of the manager, are far more important elements in production than the material resources and facilities employed. Upon them depends the efficient use of resources and facilities. The economical use of resources and facilities. and the effective coördination of services will depend upon the quality of the organization, the soundness of policy, the efficiency of management and the ability and willingness to coöperate of all who take part in a given industrial enterprise. Organization, policy, management and coöperation are not contributed by the owners of capital, as owners of capital. The owner of capital may or may not possess the required ability; and if he does, and invests both his capital and his ability in production, his ability will constitute a contribution to production separate and apart from the capital he owns. It is, therefore, the possessor of the ability to organize, manage and carry on industry who discharges the capital function—not the owner of capital. In fact, the owner of capital, merely on account of his ownership, does not function in production at all. Rightfully or wrongfully, he has acquired a certain control of resources, material facilities, or human ability, that he may hold or release at his pleasure. As owner, he is interested in obtaining a return on his property. This is an incentive to diligence and efficiency in its use, but it is no evidence of ability to employ capital profitably to himself or justly and beneficially for the service of the people. Furthermore, when self-interest is not accompanied by ability and regard for the rights of others, in the owner of capital

wealth, he will naturally seek the easiest way to obtain a profit from its use. He will, therefore, be as likely to use it to the detriment as to the benefit of industry. Such an owner will be indifferent regarding the efficiency or justness of the use of his capital by others; he will be concerned only with the return he gets from its investment.

The non-operating ownership of capital is, therefore, an irresponsible element in industry. The owner can not, by virtue of his ownership, create efficiency, in organization, in management or in the immediate work of production. He can not be held responsible for that which he can not control. But the fact is that, under a so-called capitalistic system of industry, the owners of capital do not control. Control passes to the industrial and financial entrepreneur—the one who "underakes" to organize, finance and operate industrial and business enterprises. Under an undemocratic system of industry, control passes finally to financial interests far removed from the actual work of production, having neither the ability nor the desire to maintain production at the highest level of efficiency, except in so far as they deem necessary to the protection of their profits, and caring nothing for the welfare of either producers or consumers. The continuation of such a system is destructive to industrial justice, fatal to industrial efficiency, and a menace to civilization.

The Origin of Capital. All facilities for production—that is, all capital—are produced by labor: that is, by the application of human energy to natural resources. With regard to its active element, therefore, capital is self-created. Labor may be applied to the production of goods for consumption in the present satisfaction of wants, or it may be applied to the production of material facilities, the invention of processes, the perfection of devices or the creation of organization for the production of goods or

the performing of services that will satisfy wants. It may be expended in the acquiring of knowledge, or in the development of mental or physical ability to be used in production. In such cases, labor performs the direct capital function. But this is not the only source of capital. Capital is to a considerable extent a by-product of labor applied to the production of goods intended for immediate consumption. An increase in capital may even result from pure accident, as where valuable lands, mineral or other natural resources are discovered by one who is looking for something else. The discovery of the New World resulted from the efforts of explorers to find a new route to Asia; they had not the least desire nor intention to discover a new and undeveloped country. Yet the accidental discovery of America added more to the world's capital than all the "wealth of Ind," as it was then pictured to the European mind. The like has been often true of scientific discoveries that have added to capital wealth. Many improved methods in production come in exactly the same way.

But the greatest source of capital is found in what may be called the "over-plus" of industry. In the regular course of the work of production, we learn how better to assemble materials; we discover new materials and their uses; invent and apply labor-saving devices for handling materials; perfect tools and learn better how to use them; improve methods of coöperation and division of labor; and work out better policies and more effective organization of our productive activities.

The creative force in the production of capital consists of energy in the individual, in excess of what is necessary to supply his immediate needs. This surplus energy is the source of invention, of discovery, of creative art and inspired ideals. It not only creates material facilities for

production, but upon it depends the very conception of the need for such facilities. No effort would be expended for the creation of capital, unless the need for it had been recognized, any more than goods will be produced if there are no wants to be satisfied. We produce capital because we need it, or think we need it, for use in further production, just as we produce consumable goods because we desire them for the satisfaction of our needs. But we could never conceive of the uses of capital, nor of the possibility of its creation, if we had no surplus energy over what is required to produce the things necessary merely to keep ourselves alive.

On the physical side, the creative activity that is the source of capital is absolutely dependent upon excess energy; and that in turn is dependent upon an excess of nutrition. That is, the creative force that produces capital results from excess consumption; not from restricted consumption. The creative impulse grows by use. So long as the body is sufficiently nourished, the mind and the body are not weakened but strengthened by the work they do. Where the natural environment is favorable—where there is an abundance of natural resources—sufficient nourishment depends wholly upon a proper adjustment of economic relations for the production and distribution of the things that sustain energy, and a sufficient knowledge and observance of the laws of hygiene in the use of those things.

There is an important social element in the creation and development of capital wealth. Economic society gathers up and preserves the results of individual experience and experimenting. It progressively eliminates that which does not serve its purposes, and assimilates and develops that which is of use. Most great inventions are the result of this process of elimination and combination. The telegraph, the telephone, the automobile, and the airship,

wireless telegraphy, radio-activity; all are the results of the gradual perfection, by a succession of creative minds, of an idea that first had its being in the mind of a single individual. Thus the individual and the social methods of creative production supplement each other. Each individual builds on the experience of the community, and each adds his contribution to that experience.

The Conservation of Capital. There is a wide-spread popular notion that all capital is the result of individual saving; that is, of refraining from consuming all the consumable goods that may at any time exist. It is obvious from the foregoing analysis of the origin of capital that this can not be true. In fact the proposition is in itself contradictory. Capital can not be saved until it is first produced; and, as we have shown, capital can not be produced without the expenditure of the energy of individuals, which is maintained by the consumption of goods. That is, the creation of wealth depends upon the consumption of wealth. The conservation of capital consists in its right application or use for the purpose of production; not in the mere fact of refraining from consuming it.

Of course, a condition may exist where it is necessary to save for use in production a portion of the goods we desire to consume in the immediate satisfaction of wants; or even the actual need for immediate consumption may have to be curtailed, in order to prevent a dangerous impairment of capital. But in that case it will be because if we do not do so there is likely to be a still greater shortage of goods for the satisfaction of wants in the future. We refrain from the full satisfaction of present desires in order to assure more complete satisfaction in the future. Under such conditions, and only under such conditions, capital is conserved—not created—by personal saving; and that will always be at the risk of so impairing the energies of pro-

ducers by undernutrition, that the saving in material goods will be more than counterbalanced by the loss in human productive ability.

Furthermore, there are many things produced that are not intended for consumption in the immediate satisfaction of wants, and that in fact can not be so consumed. Many forms of material wealth and many kinds of service may be used either for the immediate satisfaction of wants, or for the production of other things that may be so used. Railroad trains may be constructed and used both for production and for the direct satisfaction of wants. Automobiles may be, and often are used both for business and pleasure. In the first use they are capital; and in the second they are goods for immediate consumption.

Thus, there is consumption of goods in the production of more goods, just as there is consumption of goods for the immediate satisfaction of wants. Both capital wealth and wealth fit for consumption are produced to be consumed, and for no other purpose. It is not wealth unless it may be consumed, and unless it sooner or later is consumed, either for the satisfaction of present wants, or for the production of more wealth for the satisfaction of future wants.

A clear distinction must be drawn between use and waste. Nothing is wasted that is consumed to supply a human need; nor is anything wasted that is used in the production of things that will supply human needs. It is not waste to consume in the satisfaction of wants consumable goods not more imperatively needed for use as capital, if there are any wants remaining unsupplied. It is waste to "save" consumable goods for capital uses if there is already enough or too much capital. It is waste to allow capital to lie idle, if there is any shortage of goods for consumption that might be supplied by its use. We are accustomed to

lay great stress upon waste resulting from extravagant personal consumption, while we give little attention to the much greater waste due to the non-use of human ability and material facilities available and needed for production.

Associated with the idea that all capital is the result of saving, is the equally fallacious idea that all capital is the result of sacrifice; that is, that saving can be accomplished only by sacrifice. Wealth must be created before it can be saved. All wealth, including material capital, is created by the application of human energy to natural resources. The expenditure of human energy is not, under the best conditions, a sacrifice. Labor is not necessarily a curse. While it may be true that all effort involves some degree of pain, it is also true that all normal effort is accompanied by pleasure. It is well known that pleasure is increased and pain diminished, in proportion as effort is rightly organized and applied. The creative impulse in man is the source of all economic production; and the free play of that impulse may be the greatest source of human happiness.

The economic doctrine that men will work only under the lash of necessity is not in agreement with the facts of psychology or of economics. But even if necessity were the sole effective motive that keeps men at work, it would not follow that all wealth is the result of compulsory effort. If men work only to produce the things that will keep them alive, it is evident that they will do no more than is necessary for that purpose. A man will not hold to a hard method if he can find an easy one; and when an easier method is discovered it will not be adopted under compulsion, but willingly and gladly when he is convinced that it is to his interest. • There will be no necessity to adopt the new method, because there is still the old one. Thus the very laziness of man may be turned into an asset. In so far as

the new method increases the productive ability of the worker it adds to his capital. So that every improvement represents at the same time a measure of present relief from the hard slavery of necessity, and a creation of ability that will still further emancipate him from that slavery in the future.

We have shown that a considerable portion of all the wealth that constitutes capital can not possibly be consumed for the present satisfaction of wants; therefore, there can be no question of sacrifice involved in saving it. The invention of the steam engine added more to the capital of the modern world than a century of saving; but the ability to build steam engines—which is far more important in production than all the steam engines that have ever been built—can not possibly be consumed. If we ever lose it, it will be through disuse; not through use. The discovery of the New World added more to capital than all the saving out of consumption that had been made since men dwelt upon the earth; but what was won by that discovery can not be lost, except by the decay of the ideas and institutions that have resulted from it; and that decay can come only from failure to apply those ideas and to employ those institutions to the better satisfaction of human needs and the fuller realization of human ideals.

In the face of these facts, the doctrine of "work, scrimp and save" is preached as persistently as though the salvation of the race required that every man become a miser. To believe in that idea is to hold that present enjoyment must always be curtailed in order to provide against future want; and therefore that full satisfaction of our wants can never be accomplished. It is a gloomy doctrine. The older economic writers were fond of going back to primitive times for illustrations of the idea that capital results wholly from saving and sacrifice, and that therefore

the possessor of capital may do as he pleases with it. This is convenient, because no one can be certain what did happen in primitive times; so that the setting may be chosen as the writer pleases. Here is the way it is done:

We suppose that two men are wrecked on an uninhabited island, where the only food obtainable is fish. We suppose that with such means of catching fish as may be at hand, the two are able to subsist for a time by fishing along the shore. But after a while the fish that can be caught from the shore become scarce, and our castaways are facing starvation. One of them, supposed to be more frugal, more inventive and more far-seeing than the other, saves each day a part of his catch, so that he may live without fishing while he is thinking out schemes for catching fish more easily and catching more of them. He reasons that fish will be more plentiful off shore, where they have better protection, and that they will be less wary and more easily caught. He invents a boat, paddles out from the shore in it, and proves his theory by catching twice as many fish in a day as he formerly caught along the shore. By perfecting his rude craft and pushing his explorations further, he proves that one man can catch a plenty of fish for two in less time than it formerly took two men to catch barely enough to keep them from starving. The inventor then rents his boat to his companion for half the catch, goes out of the fishing business and sets up as a capitalist.

A very apt illustration. Why shouldn't it be, when it is made to order to fit the proposition to be illustrated? The trouble with it is that almost anything else might have happened. For example: one of the men might have had the inventiveness, but not the habit of saving; while the other man, though frugal, might have lacked initiative and inventiveness. Or the uninventive man might have been

the stronger, and might have taken the boat away from its owner and made himself the capitalist, without any sacrifice whatsoever on his part. Or the inventor might have taken his companion into his confidence, asked and received his suggestions, and the boat might have been the product of their joint labors.

But another and still more important possibility has been overlooked. That is, that the invention of the device resulting in the increase of producing capacity might have involved no sacrifice whatsoever. One of the fishermen might have got tired of wading and have sat down on a convenient chunk of driftwood, and thus have been carried without effort on his part to where the fishing was better. Or the two might have found that they could paddle the driftwood out to where the fish were more plentiful. In that case, there would have been no sacrifice on the part of either; the enterprise would have been coöperative from the beginning; and the increase in capital would have been incidental to the work of producing food for immediate consumption, and would have involved no stinting in consumption. It would have been "clear velvet."

It is true that these also are mere suppositions. But they are at least as reasonable as the suppositions upon which the idea of sacrifice is based. However, we need not depend upon suppositions. It will be easy to state all the possible methods by which capital can be accumulated or conserved, either under primitive or under modern conditions.

1. The discovery or development of natural resources;
2. The invention or improvement of tools, machinery or appliances;
3. The improvement of labor processes;
4. The invention or improvement of facilities for transportation or exchange;

5. The creation or improvement of organization;
6. The increase of individual intelligence, skill or energy.

Capital so accumulated may be conserved by:

1. Consumption of the goods produced by its use, to the extent of the full satisfaction of wants, thus expanding the market for products, and maintaining the maximum of individual energy, which is the active element in capital, and which gives value to material, or passive capital;
2. The diversion to capital uses of goods that might otherwise be consumed in the immediate satisfaction of wants.

It is plain that only the second method of conserving capital involves sacrifice; and it is equally plain that it is the less important method. Furthermore, it always involves the danger that there will be an impairment of energy that will more than offset any possible gain in material capital. It is also plain that the creation of capital does not necessarily involve any sacrifice at all; and the preceding analysis has shown that where the element of sacrifice does enter, it may be progressively eliminated by increasing individual efficiency and by improving organization and methods of production.

The reader who has followed the foregoing analysis will be able to see the utter absurdity of many current ideas that claim the sanction of economic science; ideas that are especially pernicious in that they discourage attempts to better industrial conditions, to provide a more ample subsistence to those who do work of production, to lighten the burden of labor, and to eliminate unnecessary hardships and drudgery. These ideas are just now being vigorously exploited by the interests that chiefly control our industries, in the attempt to reconcile those who do the work of production to lower standards of living, so as

to leave to those interests larger margins of profit. We are told that nothing is ever accomplished except by hard work: the truth is that economic progress consists chiefly in the elimination of hard work; that is, in making work easier, more enjoyable and more effective. We are told that we "can't eat our cake and have it too." But what is cake made for, if not to be eaten? One way to be sure to have more cake is to eat what we already have. We are warned of the danger of "eating up the seed corn"; but there is a vast difference between eating up the seed corn and the proper distribution for consumption of the corn that we have produced from the seed, in order that the energies of workers may be maintained for producing more corn, and in order that the sole purpose of industry—the satisfaction of wants—may be realized. We are told that capital can be accumulated only by restricting consumption: the truth is that capital is the result of creative human energy, which can be sustained in sufficient quantity and quality only by ample consumption. We are led to believe that existence is possible only by constant drudgery, sacrifice and self-denial: the truth is that the creative energies by which our lives are sustained and normally developed, constitute the very spirit and substance out of which our lives are made. And these activities, instead of being necessarily painful and involving constant sacrifice, may become the chief source of human happiness.

The Control of Capital. These false conceptions of the origin, nature and purpose of capital are kept alive largely for the purpose of justifying its control by privileged interests. In nearly all current economic discussions it is assumed that capital is controlled by those who own it. Capital was controlled largely by direct ownership when industry was conducted chiefly by individuals; but since the development of the present complex system of industrial

coöperation, final and complete control of capital by its owners is impossible. This is true both of the human and the material forms of capital. Long ago, John Locke defined property as being that possession of an individual of which he has the absolute and exclusive disposal. Adam Smith said that a man's labor is his capital, and that he has a right to absolute freedom in its disposal. This principle, as we have elsewhere shown, has been written into our constitutions and upheld by our courts; but what individual now has the free disposal of his own labor? The worker has not free and equal access to natural resources, without which production is impossible. He has control over neither the organization nor the equipment which by his labor he has created, and without which he cannot apply his energies to the satisfaction of his wants and the sustenance of his life. Therefore, if the human element in production is controlled by its owner, ownership has passed out of the hands of persons who have created it and in whom it exists. Labor capital is no longer owned by labor.

The same is true of material capital. Individual ownership in any absolute sense has been completely eliminated. This is true of all property entering into production and which therefore is capital. It is true even of agricultural land and equipment, which is the one great class of property that seems to be within the complete control of its owners. Material capital consists chiefly of agricultural land, forests, mines, fisheries, manufacturies, transportation facilities, merchandising facilities and their necessary equipment. Agricultural land is still largely owned by individuals. The same is true of many factories and mercantile business establishments. But the value of these properties to their owners consists in their use

for production. Products are valuable only when they may be consumed or exchanged for other products that may be consumed. No one subsists upon the products of a single industry, or of an industry in which a single form of property is employed as capital. The owner of capital must therefore be able to exchange a considerable part of the product derived from its use for the products of other industries, in which other forms of capital are employed. The value of a mine, a forest, a fishery, a farm or a factory is due to the fact that by the application to it of intelligently directed human energy a certain quantity of goods can be produced that can be used for the satisfaction of human wants, or that can be exchanged for other such goods.

Moreover, the industries in which these several forms of capital are employed are inter-dependent. They are all parts of a single system of industry, to which we all contribute our capital or our labor, and in the products of which we share. The products of the farms can not be handled and marketed without warehouses and other marketing facilities. Farms can not be operated without tools and machinery, which are made in factories that are often thousands of miles away. The workers in the factories and on the railroads can not produce without food and raw materials from the farms. Metals must be mined from the earth, and transported to the places where they are to be used. It is obvious that no particular part of the property constituting the capital of this system has any value in and of itself. Its economic value is measured by its contribution to the production of the system as a whole; and its value to its owner is measured by the share of such production that is distributed to him.

How is capital employed in this tremendously complex system of industry controlled, and by whom or what

is it controlled? It is controlled by monopoly, acting chiefly through corporations; and the method of control is called capitalization.

Not only are labor and material property used in production capitalized, but the wants of the people are capitalized. The wants of the people create the demand for products. Given a certain demand, a certain quantity of goods can be sold at certain prices. If labor and capital costs can be fixed, the difference between such costs and the selling price of the product will represent the capitalized value of industry. So that the higher the prices to consumers and the lower the return to workers or to the owners of material property, the larger will be the return to those who are able to capitalize the system as a whole.

This capitalized value is represented in profits. Profit, under free competition, represents efficiency, and therefore is neither a diminution from wages, interest or rent paid for the use of capital, nor an addition to the price charged to consumers. But free competition was always a theory rather than an actual condition; and it has practically been eliminated from the modern complex system of coöperative and monopoly controlled industry. What is now paid for labor or for the use of such property as is individually owned, and what the consumer pays for the products, is largely within the determination of those who control industrial organization.

Therefore, profit represents the difference between the lowest wages that will keep labor on the job, and the lowest return for the use of individual property that will retain it in production, and the highest prices that can be extorted from consumers. As profits accumulate they are re-invested and become an additional fixed charge against production. It is through this fixed investment charge that credit is controlled; and the control of credit means the

control of all industrial factors—labor, material capital and the wants of consumers.

The Mobilization of Capital. In order to engage in even the simplest kind of coöperative enterprise, natural resources or raw materials, facilities and labor must be assembled and organized into a working system. Under modern conditions this is accomplished by means of credit. Credit is based on confidence; that is, on the belief of the lender in the willingness and ability of the borrower to repay the loan. Loans are usually made payable, and are paid in money; and money represents a demand upon production—upon wealth in existence or wealth yet to be produced. Therefore, the ability of a borrower to obtain money for the repayment of his loan depends upon his present possession of wealth, or his ability to produce wealth.

When money is lent the most liquid form of capital is transferred. Money represents a generalized demand upon all the wealth existing at a given time. The borrower acquires a loan of money when he is able to convince the one who has money to lend, of his ability and willingness to return the money, with the interest, at a specified time. It is, of course, not expected that the borrower will keep on hand a stock of money out of which to pay his loan. If he had the money he would not need to borrow it. It is expected that he will be able to convert his present property into money, or that he will produce commodities that can be sold for money. It is expected that by the production and sale of certain goods, the borrower will acquire the necessary generalized demand upon all goods for the repayment of his loan. A demand for goods is the power to buy goods. Therefore, a transfer of credit is a transfer of buying power.

The total investment charge against production is in ex-

cess of $250,000,000,000 in present money values. Our total national wealth has been estimated at from $250,000,000,000 to $500,000,000,000. It is probably not far from $300,000,000,000; so that the investment charge is over eighty per cent of our total wealth. That is, over 80 per cent of existing credit is controlled by those who hold the investment charge.

This investment charge has been accumulated almost wholly out of profits. If profits continue to accumulate at the average rate of the last seven years, within a short time they will amount to more than our total wealth. Their investment will then represent first demand upon all the wealth in existence and a part of the wealth yet to be produced. The holders of investments will have absolute control of credit, and therefore of all factors in production.

So it is evident that the accumulation of profits that do not represent increased wealth ought to be prevented, in the interest of capital as well as in the interest of labor. This can be done only by bringing about a distribution of profits proportionate to the value of services rendered in production—that is, by a democratic organization of industry.

VIII

THE CONTROL AND MANAGEMENT OF INDUSTRY

It is obvious that if industry is to discharge its true function of supplying the wants of all the members of the economic community, the control of any particular industrial enterprise must conform to a unified policy for the entire industrial system. In other words, there must be a control of industry as a whole that is superior to the control of any particular part of industry. It is just as obvious that the control of industry as a whole must reside in the entire industrial community, and that the policy adopted must look to the equal rights and interests of all its members, rather than to the interests of any individual or class.

As we have elsewhere shown, modern industry is controlled almost wholly by financial interests. The system by means of which financial interests control industry is called capitalism; the method employed is called capitalization. Brute force and relentless cruelty were the principal means of establishing and maintaining slavery. Ancient and medieval industrial aristocracies and oligarchies were built up and maintained by military power, and largely sustained by the conventions and superstitions of systems of morality and religion supported by them. Modern financial control of industry is based primarily upon the capitalization of the economic wants and the productive ability of the people, but it also draws to its support the same ideas and forces that were employed by the older systems of control. Modern industrial and financial autocracy capitalizes everything; morality, religion, tradi-

tion, custom, law, education, the press, politics and war. It capitalizes both the energies and the wants of the people; their intelligence and their ignorance; their health and their sickness; their successes and their failures; their meanest vices and their highest virtues; their loves and their hates; their cowardice and their courage; their lowest motives and their most sublime aspirations.

Capitalization first converts the productive ability of the people into profits and then the profits into interest, which is fastened upon their industries as a perpetual investment charge. This charge represents the so-called accumulation of wealth, which is really an accumulation of the power to control the ability of the people to produce wealth. If it were merely a control of existing material wealth, having no connection with the productive energies of the people, they could soon reorganize their industries so as to produce within a few years a surplus of many times more than the amount of which they have been deprived. But capitalization stifles production. It discourages initiative. It absorbs the buying power of the people and this impairs their productive energy.

Though capitalization is characteristic of the existing system of industrial control, it is by no means a modern development. The records of the most ancient civilizations show that long before written history began it was one of the most powerful instruments of industrial oppression. Where the creditor could seize the body of the debtor and sell him into servitude for the payment of the debt, it was a prolific breeder of slavery. The laws of Solon show that it had already at that early time threatened the ruin of Athenian civilization, and the earlier laws of Lycurgus show a like condition among the Spartans. In ancient Rome the burden of interest that was fastened upon producers proved to be a worse evil

than land monopoly or than even chattel slavery itself. The money lent to producers was acquired by the abuse of industrial or commercial privileges, such as in our own time. In one form or another the evil was so great in the Middle Ages that the taking of interest in any form was condemned as usury and forbidden by the church. The evil did not lie in the mere fact of exacting payment for capital actually supplied to industry, but in the accumulation of debt by the process of capitalization, and the lending of the debt, under such conditions that industry could not go on except by constantly accumulating more debt.

Yet, oppressive as the older systems were; harsh as were the conditions imposed upon borrowers; and inhuman as was the treatment of defaulting debtors, the system of control by capitalization was never so oppressive and never so great a menace to industrial prosperity as it has become in our own time. Owing to the large-scale organizations of industry made possible by modern inventions and discoveries, it has been possible to capitalize all the industries of a nation practically as a single system. All the industries of Great Britain, including her trade with her colonies and her commerce with most of the nations of the earth, were before the war almost completely under the control of a small group of bankers. There had always been a close alliance between banker interests and the Prussian military autocracy. It is well known that in this country no great enterprise either public or private can be entered upon without the consent of the group of banking interests that control the nation's credit, and it appears that now the economic fate, and therefore the political fate of Europe as well, depend upon their determination.

We have been greatly concerned in this country over the merging of large industrial corporations, that have de-

veloped monopolies injurious to producers and oppressive to consumers. The railroad monopoly, the elevator and milling monopoly, the oil monopoly, the packing monopoly, the steel monopoly, and the coal monopoly have successively been subjected to federal or State regulation, but with doubtful benefit to the people. Railroad combinations remain, but there is no effective unity of the transportation service. Though the railroads are economically bankrupt, they are carried in our financial system as an asset, dividends on their excessive capitalization being assured by the fixing of rates. On its present basis of capitalization, the coal industry is economically bankrupt; but its financial solvency is maintained by attempted enslavement of coal miners, and by charging extortionate prices to consumers of coal. Practically all marketing services are tremendously costly, owing to the over-lapping and duplication of services and inefficiency in operation; and, as in the case of the railroads, this very excessive cost is made the basis of a financial asset to the interests that shape our industrial policies. It is both an element in profit and a factor in control. The earnings of agriculture are capitalized into land values. Land furnishes one of the safest investments for profits. Through foreclosure and otherwise, the best agricultural land is rapidly being absorbed by investment interests; so that all resources; all the productive energies of the people; and the needs of the people for the things that by their labor they produce, are progressively capitalized into profits, the profits converted into permanent investments, and the investments concentrated into the hands of syndicates of bankers, who have no interest in industry other than as a basis of their power and a source of financial gain.

Notwithstanding its tremendous accumulation of wealth and power, the financial control of industry is not conducive

to efficiency. It is not a constructive method of control. Bankers know little about the actual work of organizing and managing industry and practically nothing about the actual work of production: they demand satisfactory evidence that an industry will yield profits before they will supply it with credit; and this is held to be a sufficient check upon inefficiency. But profits result from monopoly much more often than from efficiency; and the profits of monopoly do not represent efficiency.. Temporarily, inefficiency may be made to yield profits with a high degree of certainty, while the profits from efficiency would be uncertain, as is illustrated by the railroad and the coal industries. It may, of course, be presumed that bankers prefer to invest in efficiency rather than in inefficiency. It must be that they are aware of the fact that if profits that do not represent efficiency continue to be taken, the result will be the final bankrupting of all industry. But, as a matter of practical business necessity, they must continue to extend credit where there is a certainty of profits, and to withhold it where profits are uncertain, regardless of the relation between profits and efficiency. Our principal trouble lies in the fact that our industrial affairs have been so shaped that they have passed under banking control, and banking control of industry is in its nature neither just nor efficient.

Much has been said in this country about the enterprise of financiers in building up new industries. But rarely, if ever, do financiers take the initiative in the organization of new enterprises. The foundation of every great modern monopoly has been laid by individual enterprise, or by discoveries made in institutions largely supported by the people. The present monopoly of copper production, that during the war yielded profits as high as two hundred per cent annually, is based on a process for extracting the metal from low-grade ores, that was the result of investiga-

tions made in this and other countries, largely at public expense, and of the work of geologists and engineers who for years carried on their work without adequate support. The value of Minnesota iron ores, which now constitute the basis of the immensely profitable business of the United States Steel corporation, was fully demonstrated before any of those who organized that industry became interested in its possibilities. Two brothers named Merrit owned some iron properties on the Mesabi Range in Minnesota, and wanted to build a railroad to haul their ore to Duluth, where it could be loaded onto lake boats and shipped to the steel mills in Ohio or Pennsylvania. They had a hard time financing the project, and finally borrowed about half a million dollars from Mr. Rockefeller, giving him as security a mortgage on their mine and railroad. Subsequently, Mr. Rockefeller foreclosed on this mortgage, and when the United States Steel Corporation was organized he turned in these properties, receiving in exchange for them $39,000,000 of preferred stock and an equal amount of common stock. Mr. Rockefeller's share in the earnings of the corporation since its organization will amount to more than a quarter of a billion dollars, or nearly three thousand per cent annually on his original investment.

It will be said that it was chiefly the organization of the corporation that produced this enormous value. If that is conceded, it is none the less true that all the elements of efficiency in the mining, transportation, manufacture and marketing of iron ores were present when the corporation was organized. It did not create them. And, but for the fact that financial interests at that time largely controlled the markets for iron products, as well as the transportation facilities by which they were carried to the markets, the industry might have been organized on a

different basis. There might have been equal or greater efficiency in actual productive processes; and the rewards of efficiency might have gone to those who created efficiency. Instead they accumulated as profits, and were added to the investment charge against production held by the great financial interests. It is so with every other great successful corporation monopoly. But both interest and profits come out of what consumers pay for products. The ability of consumers to buy products is measured by their earnings. The total economic earnings of all consumers is included in wages, interest and profits. If we consider that what the farmer receives for his products represents wages—in most cases it is far less than the average of the wages paid to unskilled labor—the majority of the people do not participate to any considerable extent in interest or profits. Therefore, the buying power of consumers decreases almost in exact ratio as interest and profits increase. Production is adjusted to decreased buying power, so that there is an actual shortage of products for the supplying of the economic needs of workers. With impaired sustenance, efficiency is still further decreased. So that the financial control of industry progressively undermines itself, and at the same time it destroys the foundations of industrial efficiency.

Under financial control no economic organization of industry as a whole is possible. Financiers have no common purpose in controlling industry except that of financial profit; and that is not the purpose of those engaged in production, but the purpose of those who, from the outside, control production. It is not even possible for industrial monopoly to develop economic efficiency for the purpose of making profits out of increased production at lower cost. While it is true that any industry must show a margin of profit in order to secure financial credit, and

while it is also true that in many instances consolidation of industries would increase the margin of economic profit, industries can not be consolidated except on a financial basis. So consolidated, any efficiency that might result is capitalized, and over-capitalized, from the beginning. By this very process there is created an inefficiency in distribution that will swallow up every possible increase of efficiency in production. This is again illustrated by the case of the railroads. The actual and prospective value of their services to industry was over-capitalized years ago. No part of such value could by any possibility ever go over to producers or consumers not sharing in the profits of the railroads. When the roads failed to make good the values at which they were capitalized, the people had to dig down into their pockets to make up the difference. Though it is evident that the efficiency of the railroads would be immensely increased by organizing them into a unified system, they can not be so organized except on a financial basis; that is, on a basis of financial profit; not on a basis of economic efficiency. Whatever economic efficiency might result would be incidental, and, as in the past would be swallowed up by overcapitalization.

Though the financial control of industry rests upon industrial monopoly—upon the enjoyment of special advantage or special privilege in the use of resources or the control of facilities—it does not rest upon any single industrial monopoly. Transportation is an extremely important factor in the financial control of industry. Markets are equally important. The power to dominate industry rests largely upon the monopoly of coal, iron, oil and other mineral resources. Land monopoly is an important factor. But under modern conditions, not one of these monopolies could be maintained except through the control of credit; and credit is based on profits. The financial control of

industry is not solely based even on the monopoly of credit, in the sense that credit is always definitely and intentionally manipulated for that purpose. Though it can hardly be disputed that the flow of credit is often turned in one direction or another for the purpose of enhancing the profits of the great financial interests or for the support of their power, the ability so to direct the flow of credit rests entirely on the control of accumulated profits. And profits accumulate through the progressive adding of one advantage or privilege to another, until there are sufficient profits, concentrated under a single control, to enable their possessors to withhold or to release credit according to their pleasure.

The advantages and privileges from which profits accumulate are of many kinds. Some are natural advantages, rightly belonging to their possessors; others are such as, under existing industrial arrangements, pass to certain individuals or interests in the natural course of events; and still others are unfair advantages, or special privileges, obtained by fraud, by business trickery or by the abuse of financial or political power or the perversion of social influence or prestige. The only natural advantage that anyone may justly claim is his own ability and character. But where there is an uneconomic organization of industry, the distribution of opportunity to apply individual ability is bound to be more or less unequal. It is often wholly a matter of precedence—of being first on the ground. There is only one best farm; one most favorable site for building a town; one most valuable corner in the town after it is built; one richest mine; or one best market. The more fortunate among us have a comfortable philosophy according to which opportunity is equal to all; and even those of us who have not made a financial success of our lives like to believe that our equal opportunity exists, but

that we have merely been somewhat slow in finding it. Indeed, we must cherish some such philosophy to get on at all; but the cold, hard facts of the economic situation are against us. As in the distribution of natural advantages, so it is with the distribution of economic advantages. There is only one best business and one best position in that business. Of course, what is best for one man is not always best for another; but it is none the less true that superior business opportunities are limited, after making every allowance for difference in inclination and ability. When the best farms are taken, the most valuable mineral or other natural resources secured, the best business opportunities exhausted and the best positions filled, the holders of any of these advantages are not going to share them with others purely out of the goodness of their hearts. Rather they will use the advantages they have to secure further advantages; and those who are out must take the next best, or must pay full value for a share of the better things.

Those who hold special privileges, and through those privileges control our industries, carefully nurse the popular belief that opportunity is equal to all. It is taught in our colleges and universities and preached from many of our pulpits. We are asked to believe that the foundation of Mr. Rockefeller's fortune was the sixty cents a week or the thirty cents a week or whatever it was that he saved when he was working for a wage of three dollars a week. But at that rate of saving it would have taken more than eight million years to accumulate the amount Mr. Rockefeller made out of his stock in the United States Steel Corporation, for which he exchanged the property he acquired by foreclosing on a couple of Minnesota prospectors and business adventurers. If he had been working for a salary of ten thousand dollars a year and

saved every cent of it, he must have lived and worked twenty-five thousand years to accumulate as much money as he acquired by that one stroke of high finance. Andrew Carnegie, the first great steel millionaire, always recognized the fact that his fortune was not due entirely to his own ability and effort. He repeatedly said that it was largely due to favorable combinations of circumstances and to the coöperation of others. He declared that no man situated as he was could have avoided becoming rich. The history of the steel industry completely supports this statement. The first steel trust was built upon the invention of the cold-blast process of reducing iron-ore—the Bessemer process—which was discovered in the United States by a man named Kelly, who had been operating a small wood furnace somewhere in Kentucky. After proving out his new process, Kelly went to some of the biggest iron and steel men with it and was able to convince them of its practicability and value. Some of these men saw at once that there were millions in the new process; but it was known that it had been discovered by Bessemer in England at about the same time. They wanted a monopoly of the process in the United States, and above all they wanted to be protected against the competition of "the Bessemer people" in the American market. Their opportunity came when the civil war made it necessary for the federal government to find new sources of revenue. They secured the enactment of the protective tariff on iron and steel products which, with the Kelly process, was the basis of the fortunes of the first steel magnates.

What became of Kelly? He received a few thousand dollars for his process and retired from the stage on which was enacted the greatest industrial drama in the history of civilization—the ushering in of the age of steel. He went the way of a thousand other inventors and discoverers

whose ability and genius have contributed to the building up of gigantic corporation monopolies and mammoth private fortunes; except that many of them received nothing at all for their inventions or discoveries. It will not be denied that Mr. Carnegie and Mr. Rockefeller were men of exceptional ability. Nor will it be questioned that such men discharge an important industrial function. They are entitled, as of right, to the disposal of all the wealth they create, as long as they do not infringe upon the equal rights of others. But they are not entitled to employ their wealth or their control over the production of wealth for the building up of a system oppressive to consumers and destructive of economic efficiency.

Industrial policy should be so ordered that all individuals will be equally free to organize and engage in any industrial enterprise, and will have equal access to resources, facilities and markets—that is, equal access to capital. The mobilization of labor and facilities for production is a separate industrial function lying in between control and management. It is the function that under our system is discharged by the promoter or the "captain of industry." Under any industrial system there must be some one to initiate industrial enterprises—to estimate available resources, facilities, labor and markets, and to formulate plans for their organization and operation. This function is best described by the term "entrepreneur," which in economic science means one who undertakes the organization and operation of any industrial enterprise; who brings together the various agencies of production and consolidates them into a working unity for the achievement of the purpose in view. But this does not mean that the entrepreneur acquires any right to control industry superior to that of anyone who contributes other services or money capital to the enterprise he undertakes and organizes. He

is still a functionary of the industrial organism, of the same kind and on the same plane with that of the manager or the man employed in any particular work connected with the enterprise. His part in control is to be measured by the value of his services to the enterprise, not by the fact that his service is of such a nature that it may enable him to dominate the enterprise.

The control of any particular industrial enterprise belongs to those who contribute to it their services or their money capital. They may control it in any way they please, so long as they conform to the general policy established by the people for all industry. They may provide any organization for the enterprise that conforms to the general scheme of organization provided for all industry.

Management is a function of a particular industrial enterprise; not of industry as a whole. In the exercise of their sovereign power the people may control all industry and may adopt a policy for its organization and operation; but we should hardly say that in so doing they would be managing industry. Nor do those who now control industry by financial methods manage industry, except when they interfere in the internal affairs of separate industries. Much has recently been said about the responsibility of capital for management, and all that has been said is pure absurdity. What could be more absurd than the assumption that because a man knows how to calculate interest, to clip coupons or to read a stock ticker, he will also know how to manage the intricate affairs of a great industrial organization?

Nor do those placed in charge of an industrial enterprise discharge the direct function of management. They, with such expert advice as may be at their command, provide an organization under which management is to

operate, and then secure the services of persons qualified as managers. The function of the board of directors and the president or other officials of a corporation is administrative; it is not managerial. There have probably been more industrial disasters from the failure to distinguish between these two functions than from any other single cause.

Though in every industrial enterprise responsibility for management must be definitely placed—preferably in a single person, responsible to administrative control—the actual function of management is distributed throughout the enterprise. It is divided among superintendents, supervisors and foremen, and is even shared by the workers on their several jobs. It is essentially a coöperative function. The efficiency of management depends upon the proper distribution of the function in accordance with the principles governing individual and coöperative activity. Economic management will recognize that man is not a machine; that his activity is necessarily self-directed; that freedom conduces to efficiency; and that fear destroys efficiency. It will be recognized that the authority of the manager gives him no claim to superiority, except with regard to the affairs placed under his direction; and it will be recognized, on the other hand, that every employment, from the highest to the lowest, must be answerable to the authority of management, in order that the work of all may be coördinated to the achievement of the highest efficiency. The consciousness that management is under the joint control of all those who are engaged in the enterprise—who contribute to it their labor or their money capital—will tend to create good feeling between labor and management, and will greatly facilitate voluntary coöperation. And only by voluntary cooperation can the highest efficiency be achieved.

This will require a reorganization of industry in accordance with the principles of democracy set forth in preceding chapters. The principal thing that stands in the way of such reorganization is overdevelopment of certain economic interests, and the injection into the control of industry of certain uneconomic interests, the chief and the most dangerous of which is the financial interest, supported by the capitalization of monopoly profits. But there are fundamental economic interests that must be taken into consideration in any reorganization of industry. All human activities are governed by motive, and the outward expression of motive is interest. It will be the purpose of the next chapter to analyze and define the several interests in industry and to indicate how they may be secured, developed and unified.

IX

INTERESTS IN INDUSTRY

The Consumer Interest. There are two basic interests in industry, the producer interest and the consumer interest. The consumer interest is based on the need of all individuals for the things that will satisfy their wants. As this interest is shared by all individuals, it is a public interest. Society as a whole, as a matter of self-preservation, is concerned to provide that the lives of its members shall be sustained and their energies maintained at the highest possible level of efficiency. The consuming interest is an individual interest as well as a public interest, because every individual is directly and personally concerned for his own sustenance. The consumer interest is the primary industrial interest. If there were no need for life-sustaining goods there would be no wants; if there were no wants there would be no demand; and if there were no demand there would be no production, nor any need for production. There would be no industry.

The Producer Interest. The things that will satisfy wants can be produced only by the application of human energy to objects and forces in nature. This expenditure of human energy we call work—labor. All production is for consumption, either in the immediate satisfaction of wants, or in the production of things that will satisfy wants; and all producers are consumers. Excluding those too young or too old to work, and such others as are otherwise incompetent, all consumers are also producers.

Those who are unable to work are supported by the community, or by other individuals who are responsible for their maintenance. Such producers represent the non-producers dependent upon them in the economic community; so that we may say that every member of the economic community is both a producer and a consumer.

Economically, every individual's ability to consume depends on his ability to produce. In coöperative industry, what anyone may have for the satisfaction of his wants depends also upon what is produced by all other persons who are members of the same economic community. The energies of all producers are sustained by consumption, so that every consumer is interested in all production, and every producer is interested in all consumption. The producer and the consumer interests in industry exactly correspond to each other and are exactly equal, both in the economic community as a whole and in every member of the economic community.

The Labor Interest. Labor is the active and sentient factor in production. It consists in the application of human energy to natural resources, by the use of material facilities. Material facilities are created by labor and human energy is sustained by the consumption of the products of labor. Every worker is a consumer, living on the combined product of his own labor and the labor of all other members of the economic community; so that every worker is interested in the productive efficiency of every other worker. Since productive efficiency depends upon sufficient sustenance, every worker is concerned that there shall be enough produced to sustain the energies of all. But this, as we have seen, is primarily a consumer interest. The share of any worker in the total product of industry is measured by the value of his services in production. The more efficient the

work of each, the more there will be to be distributed among all producers. But each individual worker is primarily interested in the satisfaction of his own wants; that is the primary purpose for which he expends his energy. He is, therefore, interested in obtaining the largest possible relative share in the total product of industry. Every worker, therefore, will strive to have as high a value as possible placed upon his services; and the same will be true of every class of producers. This is an apparent conflict with the consumer interest, but it is only apparent. Consumers are interested in having their wants supplied at the lowest possible costs. Economic cost is measured by the amount of human energy expended in production. The total energy expended includes the efforts of all those engaged in production; but energy exists only in individuals, and can be expended only by individuals. Individuals expend their energies only for the satisfaction of their wants; so that to induce them to expend their energies is to insure that by so doing their wants will be satisfied. It is to the interest of consumers, therefore, that every producer should receive out of the total product of industry the exact equivalent of his contribution to production. If each receives the exact equivalent of his services, no one will receive more than the equivalent of his services. If anyone receives more than the value of his services, the total that can be shared among other producers is cut down by the amount of the difference and efficiency is impaired, because the reward does not depend on efficiency. If anyone receives less than the value of his services, his incentive to efficiency is weakened, and again the result is a smaller total of products to be shared by other producers. So that the economic interest of all is served by protecting the economic interest of each individual producer.

The Capital Interest. In the course of production for the satisfaction of wants, discoveries are made, processes perfected, tools and facilities invented and supplies accumulated that make production easier. The energies and capabilities of producers undergo a corresponding development. An improvement in brain and nerve structure, and in coöperative industry an improvement in organization, corresponds to every improvement in external conditions. A more ample supply of food, better clothing or more adequate shelter conserves and increases physical and mental energy for further production. So that there comes to be developed a productive capacity in excess of immediate needs for consumption in the satisfaction of wants, that may be employed in the satisfaction of such additional wants as may be developed, or in still further developing physical or mental energies, or increasing and improving material facilities. This excess of productive ability we have called capital.

While all capital is produced by labor, it is not produced in equal amounts by all who labor. Nor is capital accumulated in equal amounts by all individual workers, or at all times according to their respective needs. Some are too young or too old to work while others are in their prime. Some are fortunate while others are unfortunate. Some are careful and others are thriftless. Some, from necessity or from choice, consume all that they earn as they go along, while others accumulate for consumption or for use in the future. A mature worker may loan to a youth who is not yet able to support himself, with the understanding that the loan is to be returned when the young man has developed his producing ability, and the one who has helped him is perhaps advancing in years and no longer able to support himself. One may require more tools and equipment than he possesses, while another has more than he can presently

use; and later the situation may be reversed. There arises a need for the exchange of excess ability to produce. It is obvious that exchanges can not always be directly effected. There is not always an immediate demand for capital, while if only immediate demands were provided for, needs developing in the future could not be supplied. The possible excess would not be created and conserved, and, lacking capital, the efficiency of future production would be impaired.

Thus there arises a capital interest in industry. This interest is also shared equally by both producers and consumers. In the first place, capital is produced by labor; labor is primarily an individual function; and therefore the individual producing capital has the same interest in it, and the same right to have that interest protected, as in the production of goods for consumption. In the second place, since production is accomplished by labor, aided by the use of material facilities, every worker is interested that there shall be an adequate supply of capital for use in production. He is interested not only in having an adequate supply of material facilities, but in having associated with him other workers who possess a high degree of physical and mental ability, so that material facilities can be organized and applied to production with the greatest possible advantage. Likewise, he is interested in having the best possible organization of the industry in which he is associated; and all these things, accumulated and available for use in production, constitute capital.

The capital interest is shared by all consumers. Consumers are concerned to have their wants supplied at the lowest possible cost. Efficiency reduces cost, and capital is an element in efficiency. As in the case of labor, consumers are concerned that payment for the use of capital shall be proportionate to its value in production. Over-payment

increases the cost of production, and under-payment discourages the accumulation and investment of capital, and thus also increases the cost of production.

As related to the interests of individual producers, the consumer interest in capital is a public, or social interest. Its protection is a public function, as the protection of labor is a public function. For its own preservation, the economic communtiy is concerned to devise and adopt such a policy as will provide for the creation and conservation of a supply of capital adequate to the needs of production. It is concerned that there shall be a proper coördination between capital and labor, and a proper distribution of the products of labor between immediate consumption and capital uses. It is concerned that there shall be no idle labor or material capital, so long as there are any wants remaining unsatisfied, and that there shall be no accumulation of goods desired for consumption, if such goods are not needed for use in production.

There is another public interest in capital. The economic community as a whole shares in its creation. In the first place, the value of capital depends in part on markets for the goods in the production of which capital is employed; markets depend upon demand, and the community furnishes the demand. In the second place, the public furnishes protection for capital, thereby facilitating its creation, conservation and profitable employment. But the community contributes more directly to the creation of capital. It maintains an educational system through which the productive ability of individuals is developed, and it provides economic services that greatly facilitate production. But even these do not constitute the most important community contribution to capital. This is found in what has been called the economic increment in industry. As a result of the development of efficiency in a particular indus-

trial enterprise, there is increased efficiency in other industrial enterprises. Organizing or managing ability, inventiveness, skill, energy and morale produced in one enterprise in excess of its needs are available for other enterprises. The value of any enterprise, and therefore of the capital invested, increases as population increases, as transportation facilities are developed, homes built, industrial or business enterprises established, and as progress is made in all the activities of individual and social life. This capital is not an individual but a community product, and the public is concerned that this community capital shall be employed for the equal benefit of all the individuals making up the economic community.

Interests in Control and Management. In order that industry shall discharge its functions of supplying the economic wants of the community, it is necessary that it be organized in accordance with economic principles. There must be a balance between production and consumption, and there must be such coördination among the several factors of production, that they will work together efficiently to the achievement of the desired end. Credit, marketing and transportation services must be provided, by promoting individual initiative, providing for voluntary coöperation under equitable and economic conditions, or by public ownership, as may prove in any case most just and beneficial. The providing of such organization and coordination of industry is a public function. It is a public interest, that must be guarded, protected and promoted by a public policy.

Under such public policy, each separate industrial enterprise should be self-controlled and self-managed. Where industry is on the individual basis, each person controls and manages his own industry, subject only to such limitations and regulations as are necessary to protect the equal rights

of others. In coöperative industry, all those contributing their labor or their money capital are interested in the control and management of the industry, in proportion to the value of their respective contributions. Each has invested in the industry something that of right belongs to him—his labor or the product of his labor—and has a right to a share in control and management proportionate to the value of his investment. His investment is in the efficiency of the industry, and efficiency depends largely upon control and management. The earnings of capital investment depend upon the efficiency of labor, and the earnings of labor investment depend upon the efficient use of capital; and both depend upon a wise control and an efficient management of the enterprise. So that, under a sound economic system, labor and capital are mutually and equally interested in control and management.

Those who invest labor or money capital in any industrial enterprise are also interested that there shall be such public policy for all industry that their rights will be protected and that the greatest efficiency will be achieved. The public is equally interested that there shall be efficient control and management in each separate industrial enterprise. Therefore, the producer and the consumer, the public and the individual, are mutually and reciprocally interested in equitable and efficient control and management, whether of industry as a whole or of separate industrial enterprises.

To every economic interest there corresponds, on the one hand, a social or individual right, and, on the other hand, an economic element or an economic factor or function. Production and consumption are the basic elements in industry, and the interests of producers and consumers are the basic interests in industry. Control, management, capital and labor are factors in production, and there is a pro-

ducing interest corresponding to each. Control, management and labor are functions of production, and function is controlled by interest. It is interest and interest alone that stimulates efficiency in the discharge of either of these functions. There is a right corresponding to each interest, that rests in each case upon the fundamental and equal rights to life, liberty and the pursuit of happiness. The equal right to life includes the equal right to use the means of living. The equal right to liberty includes the equal right to self-control of industrial activity; and the equal right to the pursuit of happiness includes the equal right to free choice of industrial occupation. So that equal protection of the several industrial interests will secure the equal industrial rights of individuals and will provide for the highest industrial efficiency. In these industrial interests is found the key to industrial democracy.

The Rewards of Industry. The interest which any individual has in the products of industry is created by his labor—his contribution to production. Contributions are made in the shape of money capital—the fruits of past labor—of organizing, managing or directing ability or labor directly applied to production, under the organization, control and management provided. The functions of control, organization and management, being human functions, are properly included in labor; therefore, the combined earnings of labor and capital represent the entire product of industry. Since capital is the product of labor, in the larger sense the earnings of labor represent the entire product of industry.

Accepted economic theory recognizes four interests in the product of industry: labor, capital, land—or property—and the interest of the organizer or promoter of industry—the entrepreneur. The reward assigned to labor is wages; to capital, interest; to land, rent; and to the entrepreneur,

profit. It is held by many that land rent is an unjust and uneconomic charge upon production, because it is due to land monopoly. But other property is the creation of labor, and rent charged for its use is therefore justified on the same principle that justifies the taking of interest on capital that is created by labor. Under the existing corporate monopoly of industry, however, land rent is largely covered into profits; so that we may disregard it as a separate charge upon production. Interest on capital is a just charge upon production; it in fact represents the interest in the products of industry created by the labor of its possessor; always presuming, of course, that the capital was fairly and justly acquired—that its possessor actually did produce it by his labor.

There remains the reward assigned to the entrepreneur. In this connection it must be remembered, in the first place, that monopoly profit does not represent the service of the entrepreneur—it does not represent any service at all—and, in the second place, that the function of the entrepreneur is coördinate with that of management and that of labor. The reward of labor is wages, and the reward of management is salary, which is another name for wages. So the proper reward of the entrepreneur is not profits, but salary, or wages.

To what interest does profit belong? Monopoly profit, where there must be monopoly, as in the case of natural monopoly, belongs to the public. Economic profit is the result of efficiency, and should be distributed among those who produce efficiency. The public—the consumer—the entrepreneur, management, and labor contribute to efficiency. The functions of the entrepreneur and the manager are parts of the function of labor; therefore, profits should be distributed between labor and the public, in proportion to the contribution to efficiency of each. This

would not only distribute the reward for efficiency where it would be an incentive to efficiency, but it would prevent the concentration of control that prevents the economic organization and operation of industry; and it would prevent the concentration of buying power that has lately proven so disastrous. It would balance production and consumption.

Wages and Profits. But if profits are to be shared between labor and the public, why not add labor's share to wages? The answer is that the wages or salary paid to a worker in any industry represents the relative value of his services, as compared with the value of all other workers in the same industry. The aggregate wages of all workers represent the value of labor invested in the industry, relative to the value of money or property invested in it. Wages are paid to labor and interest is paid to capital as a part of the cost of production. Profits come out of surplus; but there may or may not be a surplus. That will depend upon the conditions under which the industry is carried on; the contribution of the public; upon the soundness of the policy and administration of the industry; upon the effectiveness of its organization; and upon the efficiency of management and labor. Under a democratic system of industry, wages would represent the minimum reward for labor—the least that would induce a worker to invest his labor in any industrial enterprise—just as interest would represent the lowest return that would induce the owner of capital to invest it in any enterprise. Labor would fix its own wages and capital would fix its own interest, and the management of any enterprise, representing both capital and labor, would determine whether or not it could pay the wages or interest asked. There would be a free market for both labor and capital, because, with monopoly profit eliminated and economic profit distributed, there could be no control of labor by capital or of capital by labor. Capital would continue to

be handled by trustees, investment companies and banks; but there would be no possibility of a capital monopoly, because the profits of these concerns would be distributed, and their control and management apportioned between the several economic interests. Labor would have its own organizations, as at present, and could place its own value upon its services; but it could not enforce arbitrary wage-scales, because all industry in which it could find employment would be controlled jointly by the public, management, capital and labor; and all would be interested in securing the highest possible efficiency at the lowest possible cost, in order that there might be a surplus to be distributed among them.

The Maintenance of Labor. Under an uneconomic organization of industry, as under the present system, the primary interest of the worker is in obtaining the highest possible wage, since his wage represents his relative demand upon total production; under an economic organization, his wage would be the basis of his dividend. Similarly, the primary interest of the owner of capital is to obtain the highest possible rate of interest or dividend. But labor, capital and the consumer have a common interest in efficiency; and labor—including control, organization and management—produces efficiency. The energies of labor are sustained by nutrition, and nutrition is supplied by consumption. It follows that if labor is not able to consume enough to maintain its energies, every economic interest is injured. Consumption is measured by buying power, and the buying power of labor is measured by wages; so that every economic interest is concerned that labor shall receive a living wage.

If industry were organized on a democratic basis, in which all interests received equal protection, it is likely that the lowest paid laborer would receive at least a minimum

living wage. This is made especially probable by the practical certainty of a tremendous increase in production under a system organized for efficiency instead of for profit. But labor as distinguished from capital, control, organization and management, will be in a position of disadvantage under any system. In our highly differentiated systems of production, the efficiency of the majority of workers depends largely upon close application to their jobs; and in most cases the job is not of such a nature as to develop the general powers and capabilities of the worker. Furthermore, the lowest paid worker must always stick close to his job in order to make a living. So that the average worker has neither the time nor the ability to look after his own interests. Under a democratic industrial system it is probable that the matter of a minimum living wage would be taken care of as a common interest of the consumer on the one hand and the several factors in production on the other, if it did not adjust itself by free investment or by negotiation between labor organizations and management, but it might be that even under such conditions the assurance of a minimum living wage would have to be made a public interest. It is certain that under the existing system it ought to be made a public interest. It is frankly admitted that the existing system of industry is based upon the assumption that every interest will take and hold all that it can get, whether it be in the control and domination of other interests or in the distribution of the products of industry. It is obvious that without organization the average laborer can do practically nothing to protect his own interests. He can be protected only through his organization. But labor organizations can protect the interests of their members only by adopting the same policy that governs all other interests—that is, by taking and holding all they can get. It has lately been held by corporate employing interests that

the principle of a living wage is an unsound basis for the fixing of wages. They are wrong, if they have in mind the welfare of all economic interests. But they are right if they mean that it is an unsound or impracticable principle upon which to base labor policy, so long as other interests continue to act on the principle of every one for himself and the devil take the hindmost; and that seems to be the only principle upon which the present system will operate at all.

Whether from policy or from conviction of the rightness of the principle, in their demands for a living wage, labor organizations have taken upon themselves the protection of a common economic interest—an interest that ought to be protected as a matter of public welfare. And even if we admit that this is largely a bid for public sympathy, it is a significant fact that labor is the only economic interest that is openly, honestly and squarely contending for the protection of this fundamental and vital human interest. There is no business or commercial organization, there are no powerful and wealthy civic or charitable associations, and lately there is no part of the public service that is concerned to prevent the degradation of labor, destruction of its efficiency and the consequent decay of industry and the civilization supported by industry. The principle is given valuable support by The National Catholic Welfare Council and other progressive church associations; but, on the whole, the moral support given by the public to the principle of a living wage is less than it was before the war. Without better support from the public it will be impossible for organized labor to protect this vital interest. It will be compelled to defend its interests by the same methods that are employed by the interests opposed to organized labor—by taking and holding every possible advantage that it can wrest from them, under

a system in which industry is a battlefield for contending interests, rather than a coöperative human enterprise, carried on for the promotion of the common welfare.

The only possible way to bring to an end this destructive industrial warfare is to reorganize industry on a democratic basis, so that all individual and social rights will be equally protected and all economic interests equitably balanced. This does not mean an entirely new organization of industry. Existing industrial organizations contain all the elements for the necessary reorganization. They are in some measure adjusted to the fundamental social and economic principles that control all human organization, otherwise they could not have survived at all. Through existing organizations we have developed the interests the coördination of which will constitute the basis of industrial democracy. The very principles of democracy themselves have been developed and made explicit through existing organizations; and all the elements out of which to construct industrial democracy are found in existing organizations. They represent the accumulated industrial experience of the race, and experience is all that we have to build upon, in the adjustment of our affairs and in the working out of our individual and social purposes.

Bearing these truths in mind, we shall present in the next chapter an analysis of past and present industrial organizations, in order to prepare the way for the presentation of the plan for the reorganization of industry in accordance with the principles of democracy.

X

THE ORGANIZATION OF INDUSTRY

THE ability of industry to recover from crises arising out of the decay or the collapse of autocratic systems is due to the fundamental nature of industrial activities. The wants supplied by industry are fundamental wants, upon which the very existence of individuals and nations depends. The interests that are developed are fundamental interests, that have a greater influence upon the conduct of men than the interests that attach them to any particular social, political or economic system. In the earliest industrial organizations there were both individual and co-operative activities, and therefore both individual and co-operative interests. These activities and interests must develop side by side to enable industry to go on at all. Therefore they are always present, and there is always some sort of working adjustment between them in any industrial organization and under any kind of control. When any external or uneconomic control is removed, industrial society falls back upon this working adjustment. There is an internal reconstruction of industry, in accordance with economic and social principles, as is proved in the experience of the economic community itself. It is based on actual experience, and not on untried theory.

This must be the basis for the reconstruction of our present industrial system. It is therefore necessary briefly to examine existing industrial organizations, in order to determine the extent to which these activities and interests

have been developed, and the manner in which they are adjusted in the present industrial system.

We may classify existing industrial enterprises with regard to control, management and operation as individualistic or coöperative. But none of them are purely either individualistic or coöperative. Where shoes are made in a factory that is owned, controlled and operated by a corporation or coöperative association, the general plan of administration and management is coöperative, and a part of the work of making shoes will be done by individuals in direct contact and coöperation with each other. But other parts of the work will be done by separate workmen, each engaged in a specialized task, as individualistic in character as though it were not at all connected with a coöperative organization. On the other hand, where a man makes shoes in his own shop, entirely by his own labor, he unites within himself the functions of control, management and labor, and holds the entire producing interest in the industry, including that of labor and that of capital. But the individualistic shoemaker must buy from others the leather and other materials of which he makes shoes; so that his industry is interdependent with other industries—it is a part of a coöperative industrial organization. Furthermore, if the making of shoes is the exclusive occupation by which an individual makes a living, he must sell to others all the shoes he does not need for himself, in order to obtain food, clothing and other necessaries. So that his needs as a consumer connect him with the general industrial system, which is coöperative as between producers and consumers, as well as among producers.

We regard agriculture as the principal type of individualistic industry, yet on practically every farm there is immediate coöperation in both management and labor, and in numberless ways the enterprise is dependent upon other

activities. A farmer in North Dakota may plow his land with a plow that was made in a factory in Illinois or Ohio; perhaps pulled by a tractor made in Detroit; fed with oil from wells located in Kansas, Oklahoma, Texas or Wyoming. He may be wearing clothing made in Massachusetts, made from cloth spun and woven in Alabama, out of cotton grown in Mississippi. If we analyze any of these industries we shall find that it includes an almost endless complexity of individual and coöperative activities, and that it is also dependent in numberless ways upon other industries. So that a single farmer may use in the planting of his crops the products of the labor of hundreds of thousands of men and women, in factories, mines, fields and forests, on the railroads, in warehouses and in offices, separated from his farm by hundreds or thousands of miles, and under every known kind of organization, management and control.

There is even greater inter-dependence in other so-called individualistic industries. The farming industry is an independent, individualistic industry, in so far as the farmer has exclusive ownership and control of his farm, does all the work on it, and consumes the entire product. These conditions are approached where farming is least diversified and commercialized. But there are other individualistic occupations in which dependence upon others is complete and unavoidable. The occupation of writing books may seem to be a purely individualistic activity. But we can not eat or wear books. Moreover, under modern conditions, the activity of writing books, to say nothing of printing, publishing and distributing them, is dependent upon the work of thousands of other individuals, distributed in hundreds of separate industrial enterprises, both individualistic and coöperative. This chapter is being written in a house located in Virginia, at a table made in Grand Rapids, on a

typewriter made in Syracuse. In the construction of the house there is fir from the Pacific northwest, pine from North Carolina, sash and doors from somewhere in the Middle West, window glass from Pittsburg or Cleveland and fixtures from Philadelphia. There is metal roofing from Ohio, plumbing fixtures from New Jersey, electric fixtures from Illinois, and copper wire made somewhere in the east from copper mined in Arizona, Utah or Montana. All these enterprises were dependent upon the farms, mines and forests for their raw materials and for the food, clothing and other necessaries for the support of their workers.

These individual and coöperative elements run through all modern industry, no matter what may be the form of organization or the method of control. Whatever may be the purpose of organization or control, it will be served only as these elements are properly adjusted and coordinated.

Under the system built up by capitalism, there exist four forms of industrial organization, in each of which individualistic and coöperative elements exist in varying proportions, and in each of which there has been a development of individual and coöperative functions, corresponding to the nature of the industry, to the conditions under which it is carried on, and the nearness or remoteness of capitalistic control. These four forms of industrial organization contain all the elements out of which industry must be reconstructed; and any plan of reconstruction must include all the elements found in these organizations. They are not the product of capitalism, but the product of a progressive industrial adjustment that has taken place independently or in spite of capitalism and every other kind of external or un-economic control. They represent the accumulated industrial experience of civilization, upon which alone we can establish future industrial prosperity.

Modern industrial enterprises are controlled and operated by individuals, co-partnerships, coöperative associations or corporations. All of these are coöperative forms except the first, and each employs a different method of organization and operation, according to the nature of the enterprise, the interests involved and the purposes to be served. In all of them the functions of administration, organization, management and applied labor are individualistic or coöperative, according to the nature of the enterprise and the policy adopted by those in control. Individual or co-partnership enterprises own or borrow capital, and, except in isolated instances, employ labor. Except in so far as those who control individualistic enterprises do their own work, labor has no part in control. Likewise, those who lend capital to such enterprises have no part in control.

Modern coöperative enterprises are usually organized and conducted by persons who have a common interest in the production of certain goods or services, or in the acquiring for consumption of certain goods or services. The members of such associations contribute or borrow the necessary capital, and share in control either equally or according to their several contributions. Where any of the coöperators contribute their labor, it is on the basis of wages, the same as any employee not a member of the association, labor carrying no rights or privileges in control or in the distribution of profits. Likewise those who lend capital to coöperative enterprises have no part in control.

Corporations are organized and conducted by persons who think that they can profitably employ the labor or money capital of others. They may invest money or property of their own, or contribute their services, but in all the larger corporate enterprises, that is a secondary considera-

tion. The main thing is that there is an economic situation that will yield profits; a situation the principal elements of which are a demand for certain products or services, and an available supply of natural resources, and of facilities for the use of labor.

Those who contribute or lend capital to a corporate enterprise may or may not share in control, depending on whether they make a bond or a share investment. But in many of the great corporate enterprises, the amount of capital actually subscribed and paid in is small, as compared with the volume of stock that goes to promoters. Furthermore, subscriptions to stock are often in such small amounts and the subscribers are so widely scattered, that it is impractible for them to vote their stock; or they find it to their advantage to have it voted by those who are in control. So that the control of the corporate enterprises centers in the entrepreneur—the organizer of the enterprise. Labor has no part in control.

In each of these forms of industrial organization, all of the functions of production are either subordinated to control or are merged with control. They are merged only when in an individual or partnership enterprise the individual or firm does all its own work, including administration, internal organization, management and labor. They are necessarily subordinated under the control of a cooperative association or a corporation, because the persons in whom control is lodged can not be brought together to discharge any of the functions of production. From the board of directors down to the least important laborer, every person responsible for efficiency is hired and paid in salary or wages. Salary or wages is the only incentive to efficiency, and there is no method by which either salary or wages may be made an accurate measure of the value of services rendered.

So it is with the several industrial interests. The labor and the capital interests are represented in an individual or a partnership enterprise to the extent that the owners employ exclusively their own capital and do all their own work. The capital interest is taken care of in a coöperative association to the extent that capital is subscribed only by its members; there is no representation of the interests of lenders of capital. The interest of the owners of capital is represented in a corporation, to the extent that it is practicable for those who subscribe to capital stock to vote in the election of members of the board of directors and other officials and in the determiation of such matters as may be brought before the stockholders. But we have seen that in the larger corporations the average shareholder has little effective representation. His interest is swamped by that of the financial entrepreneurs who organize and capitalize corporations and determine their policies.

The public interest, which includes the protection of equal rights and the promotion of the equal interests of individuals, both as producers and as consumers, has no direct representation in any of these forms of organization.

The interest of labor or capital, or the interest of the consumer is protected under individual or partnership control to the extent that the several enterprises must bid against each other for labor, capital or markets for their products; that is, to the extent that there is free competition. A measure of free competition is secured by regulating individual ownership and use of natural resources and by the regulation of markets; but competition disappears in coöperative industry, and to the exact extent that there is coöperation. In fact, one of the main purposes of coöperation is to eliminate competition. It is idle to talk of

eliminating monoply from coöperative industry, because that would be to eliminate coöperation.

The greater part of modern industry is already conducted under coöperative organization and control, and there is an ever increasing need for coöperation. With the exception of agriculture, over ninety-five per cent. of the industry and business of the United States is in the hands of corporations; and is, in one form or another, being extended more and more among the activities upon which agriculture chiefly depends. But, by the method of capitalization, corporations largely control the business of all individuals, partnerships and coöperative associations.

So that the fate of both individualistic and coöperative industry rests with the corporations. Directly or indirectly they control all the functions of production and dominate all industrial interests. Therefore, if we are to secure justice and efficiency in our industrial system, we must either abolish the corporations or make them serve the true purposes of industry.

What is the source of this tremendous power of industrial and financial corporations? It is chiefly special privilege; but the most valuable of all the special privileges enjoyed by a corporation is the grant from the people of the power to do business as a corporation. We have found in the course of our industrial development that certain services are of such a nature that for the protection of the equal rights of individuals or for the securing of economic efficiency, they must be carried on as public enterprises or under public control. But the public interests are in the hands of government, and government is not in its organization industrial, but political. The government must, therefore, create an industrial agency for the carrying out of its industrial purposes. The agency that has been created is the corporation.

Corporations have come into existence only because it has been found that through them certain public functions could be discharged with greater efficiency and with greater justice to individuals than they could be discharged directly by the people themselves or by their governments. There is no other reason or justification for their existence.

Why did the people choose this particular form of industrial organization for the protection of the public interest and the discharge of the public function in industry? It was because it was necessary to have an efficient organization that could be held definitely responsible to the public for the efficient discharge of the functions for which it was created. The corporation has proved its value in efficient operation, but it has fallen down in responsibility. When organized on economic principles, the corporation is the most efficient instrument of industrial production that the mind of man has ever devised. Through the corporation, tremendous aggregations of capital, the contributions of thousands or hundreds of thousands of shareholders, are concentrated under unified control and management, and through it tens of thousands of workers join their efforts for the achievement of a unified productive purpose. Through corporations, inventive genius, organizing and directive ability, and skilled and unskilled labor are combined with an effectiveness that would be impossible under any other form of organization. Vast resources are developed by corporations, that otherwise would lie dormant. Through the corporation, markets are extended over the world, where otherwise they would be confined to the particular localities in which different commodities are produced; and the corporation has proved an efficient agency for the establishment of working relations among the several kinds of industrial enterprises and services. Furthermore, the corporation, as a form of organization,

makes possible the fixing of definite responsibility for the performance of public services, without infringing upon the rights or the just interests of those performing the services.

We have seen that both the individualistic and the coöperative elements are highly developed in modern industry; that these elements are equally important, and that they develop side by side; that there has developed a tremendous complexity in modern industry, in which all industrial activities and interests become more and more interdependent; that all the functions of production are included and all industrial interests involved in each of the four forms of industrial organization; that individual and partnership enterprises are controlled largely through the direct ownership of capital; that control in coöperative associations is in the hands of contributors of capital; and that the control of corporations is exercised almost exclusively by those who organize and capitalize them. We have seen that in all these forms of organization the several functions of production are subordinated, except where they are merged in control in individual or partnership enterprises; and we have seen that the labor interest is represented in none of them, except when merged with the capital interest in individual or partnership enterprises; and that the public interest is not represented in individualistic industry.

The labor interest and the public interest are protected by competition; but coöperation eliminates competition, and corporate monopoly has practically destroyed it under all forms of organization, through its direct or indirect control of all industry. Our problem is to devise a form of industrial organization that will equally foster and protect the individualistic and the coöperative elements; that will give equitable representation to every interest; that will coördinate the several functions in coöperative production;

and that will protect the equal rights of all individuals.

The first requisite for such an organization is that it be based upon the fundamental principles of individual and social justice that must govern all human association; the second is that it conform to the requirements of economic efficiency; and the third is that it be based upon experience—that it utilize such elements in existing industrial organizations as may serve the purpose to be achieved.

The key to the situation is the corporation. It is the highest form of industrial coöperation that has ever been developed. Corporations directly control ninety-five per cent. of all industries, except agriculture, and they indirectly control all our industries. If corporations continue under the present system of monopoly control there can be little further development of individual or coöperative enterprises except by their permission, and any development that may be made in any kind of industry will be capitalized into profits and the profits invested against all industry. Efficiency within the corporations themselves will decline at a faster and faster rate, because of the subordination of productive functions to external and uneconomic control; because of the ever-increasing degradation of labor; because of the progressive weakening of incentives to efficiency; and because of the uneconomic distribution of products that is inherent in the policy of monopolistic corporate industry. But the corporations are public agencies, operating under public grants for the performance of public services. Therefore, if the corporations can be brought under effective public control and so organized that they can be held responsible for the just and efficient performance of the services for which they are created, the most efficient form of industrial organization will be utilized for the discharge of the true function of industry, instead of for the exploitation of industry.

Corporate interests now control all the services upon which the prosperity of both coöperative and individualistic industries depend, together with all the most valuable natural resources. They control transportation, marketing and credit, the production of coal, iron, steel, copper, sugar, rubber, lumber and other basic commodities. It is, therefore, obvious that if all the industrial enterprises and services now controlled by corporations were placed on a basis of service instead of on a basis of exploitation, progress in all other industries would be assured. The corporate form of organization need not be applied to all industries, but only to such as, because of natural or economic conditions, have become monopolies that may be used for the exploitation of other industries, and such as are vital to the prosperity of other industries. The remainder of the industrial field will be left open to the free enterprise of individuals, who will choose the forms of organization they may deem most suitable for their purposes.

We have not included in our classification of industrial organizations such enterprises as are owned and operated by the public. There are many who look to public ownership for the freeing of transportation, marketing and credit services from the domination of private monopoly. There has been an important development in municipal ownership and operation of water, light and traction system, and considerable progress in the establishment of State-owned marketing and credit facilities, examples of which are the State-owned port of New Orleans, the port of Seattle, owned and operated by the people of Kings County, State of Washington, the State-owned grain elevators recently built by the State of New York, the rural credit systems of South Dakota, Montana and other states, and the recently created enterprises of the State of North Dakota. The postal service is a public industrial enterprise of

gigantic proportion. We have also the federal farm-loan banks, which have been so important a factor in the stabilization of farm credit. But in all these public enterprises, the functions of production are subordinated. Those responsible for the internal organization, management and operation of the enterprises have no part in control. Labor has no part in control, nor any other incentive to efficiency than that of holding its job and receiving wages. Control is sometimes political, and for that reason demoralizing to the efficiency of the enterprise. And in some of these public enterprises the rights of labor have received no more consideration than has been accorded to it by private corporations.

We may expect, in the future, still further progress in the public ownership of public utilities and of such other enterprises and services as are essential to the efficient and equitable conduct of private industry; but permanently successful development along this line can be expected only if we devise a method for the economic operation of State-owned industries. The people as a whole—who are the State—can not operate an industry. The peoples' government, which is organized to conduct the political affairs of the people, can not operate an industry. The government is a political organization, organized on political principles for the discharge of political functions, which are, in most respects, quite different from the functions of industry.

But the main difficulty in the way of public ownership is that public enterprises are at the mercy of private corporations. Public industry is no more immune from corporate exploitation than is coöperative or individualistic enterprise. The people of North Dakota will bear witness that State enterprises can not even be financed without the consent of the great financial corporations. A year or so ago, bonds of the city of Rio de Janeiro were held up by

world bankers, because they were issued to finance a public enterprise. The prime minister of an Australian state was recently compelled to threaten English financiers with confiscatory taxation of their colonial property, before they would release credit for the financing of enterprises established by his government. There has hardly been an important public industrial undertaking in this or any other country that has not gone through similar experience. The federal farm-loan system is practically at the mercy of investment bankers; and even the public enterprises undertaken by States and municipalities, in response to the pleas of business, for the relief of unemployment during the recent period of industrial depression and distress, were exploited to the limit by financiers, contractors and manufacturers of construction materials.

The out-standing fact of our present industrial situation is that the great industrial and financial corporations control our industries, whether corporate, coöperative, individual or public. The control of industry as a whole belongs to the people; and the corporations belong to the people. Therefore, the way for the people to get control of their industries is to take control of the corporations.

In taking control of the corporations, the people will be doing for their industries what they did for their government in 1776. The English oligarchy, through the English king and parliament, had taken control, or had threatened to take control of the government of the American colonies. The people resisted and were successful in establishing their government on the principles of political equality and justice. Corporate monopoly, supported by industrial, financial, political and social privilege, has obtained control of American industry. It is equally right and necessary for the American people to resume control of the agencies they have created, and to establish their industries on the funda-

mental principles of economic efficiency, and individual and social justice; and it is the right and the privilege of the people to employ the powers of their governments for that purpose.

XI

THE REORGANIZATION OF INDUSTRY—INDUSTRIAL DEMOCRACY

WE are proposing a plan for the reorganization of industry on a basis of democracy. The principles that must govern such reorganization are the same as the principles that govern all human action and all human relations. They are the principles upon which human society is founded and upon which the very existence of human life depends. Point by point, the principles of equal human rights—of individual and social justice—coincide with the principles of economic efficiency. An industrial organization that will secure the one will also secure the other. How can such an organization be established? American democracy has builded into its foundations the principles upon which industry can be established upon a firm basis of economic efficiency and individual and social justice. It is stated in the Declaration of Independence that all men are equally endowed by their Creator with certain inalienable rights, among which are the rights to life, liberty and the pursuit of happiness, and then it is declared that for the securing of these rights governments are instituted among men. Our governments are instituted "for the common good, for the protection, safety, prosperity and happiness of the people."

How can government secure to the people industrial liberty, and the right to enjoy the gains of their own industry? How can it protect the safety and happiness of the people, with regard to their industrial activities and inter-

ests? It can do these things by exercising the sovereign powers conferred upon it by the people, to provide such policy and organization for all industry as will secure to every individual the right to the free disposal of his own labor and of the fruits of his labor; that will reconcile and balance the interests of consumers and of the owners of labor and capital; and that will coördinate the several functions that are active in production, so that industry may serve its true purpose of supplying the economic wants of all the people.

These purposes are industrial and economic purposes, and therefore can be achieved only by industrial organization and methods. The government, in and of itself, is not an industrial organization, nor does it employ industrial methods. The policy, organization and methods that apply to a political department of government will not serve for the accomplishment of an industrial purpose. While the public has an interest in industry, the protection and promotion of which requires that the state provide a general policy for all industry, and which permits and requires direct or indirect participation by the public in all coöperative industry, according to the degree of public interest, that interest can be protected and promoted only by an economic policy, and through an industrial organization. It was shown in the preceding chapter that the corporation is the most efficient form of industrial coöperation that has ever been devised; and that industrial corporations are public agencies, created for the performance of public services. It was also shown that, with the exception of agriculture, ninety-five per cent. of our industries are directly controlled and operated by corporations, and that all our industries are indirectly dominated by them. It is apparent, therefore, that if we can reorganize corporations so that there will be in coöperative industry an equal protection of rights

and interests, and effective coördination of productive functions; and if we can devise a policy under which the corporation may be applied to all forms of coöperative industry, we shall have solved the problem of efficient and democratic industrial organization.

To this end we propose the following general industrial policy:

I. That all industries can be classified in four groups—

A. National public utilities, which shall include interstate railroads and other means of interstate transportation; the postal system, including such means of communication as may be deemed advisable or necessary for providing an efficient system of national communication; and such other activities or services as Congress, under its Constitutional powers, or the people in their sovereign capacity, may from time to time declare to be public utilities;

B. State and municipal public utilities, which shall include marketing or other facilities now publicly owned, or that may hereafter be created or acquired by any of the States; municipal traction, telephone, heating, lighting, power and water systems; and any other activities or services that may hereafter be declared by the State government or by the people of the State to be public utilities;

C. All other industries based on grants, privileges, or exploitation of natural resources, or in which there exists any natural or economic monopoly;

D. All other industries.

II. That all industries of the first group shall be owned by the federal government and organized and operated under the plan hereinafter outlined for public utilities; that all industries of the second group shall be owned by the State or the municipality, and organized and operated under the plan outlined for public utilities; that all in-

dustries of the third group shall be owned by all those who invest in them either their labor or their money capital, and operated under the plan outlined for basic industries; and that all industries of the fourth group shall be owned, organized and operated as individual, partnership, coöperative or corporate enterprises, according to the preference of those engaged in them; provided that if any industry in this group is carried on as a corporation, it shall be organized in accordance with the plan outlined for basic industries.

The plan of organization and operation for public utilities is as follows:

There will be created by the State or the United States, as the case may be, a corporation, for the operation of the given public utility. This corporation will have no capital stock and will issue no bonds. It will be governed by a board of directors, representing equally management, labor and the public. The public utility will be owned by the federal government, the State or the municipality, as the case may be, and leased to this corporation. Through properly constituted public agencies, rates will be fixed, and wages will be determined by the board of directors, which represents equally the public, management and labor. The rate-fixing body will also prescribe the amounts that shall annually be set aside to cover depreciation, upkeep, betterment, interest and the retirement of capital. Initial rates will be fixed as nearly as possible to cover all these charges and all other operating expenses, and will therefore be fixed so as to cover any deficit that may arise, or to absorb surplus, as will presently be explained. If by the increased efficiency of labor and management, or otherwise, costs of operation are reduced below the amount derived from the rates as fixed, one half of the saving will be distributed between management and labor, and the

other half will be set aside as public surplus, which may be used for extensions or betterments; but if in any year this surplus exceeds a fixed per cent. of gross revenues, rates will be reduced so as to absorb the excess, thus distributing to the public its share in the results of increased efficiency.

The share of surplus that goes to labor and management will be distributed between them on the basis of wages or salaries earned, but not in an equal ratio. Management will receive a larger proportionate share than labor. This will prevent the absorption of surplus in increased wages and salaries, by combined action of their representatives on the board of directors, since it will give those receiving salaries a greater proportionate interest in the division of surplus. It will also stimulate management to increased effort, in order that there may be a larger surplus to distribute in dividends. But if in any year the share of surplus going to management and labor should exceed ten per cent. —or such percentage as may be agreed upon—of gross revenues, wages and salaries will be increased so as to absorb the excess. Thus both labor and management will be constantly stimulated to greater efficiency, resulting in higher wages to labor, higher salaries to management and lower rates to the public.

Public utilities will be financed by the public. For the acquiring, leasing or construction of plant and facilities, and, where necessary, for paying the cost of operation until there are sufficient operating revenues for that purpose, the federal government, the State or the municipality will issue its bonds, which will be secured by the public faith and credit, and, where direct security is deemed advisable, may be made a first lien on the property and assets of the utility. Thus, there is absolute security for money investment in a public utility, so that the public will be able to secure its capital at the lowest market rate of interest.

The form of organization proposed for the third and fourth groups of industries is as follows:

The State will provide for the organization of corporations by any such persons as may desire to invest labor, property or money in any basic industry, or in any other industry not a public utility, that is to be operated as a corporation. Such corporations will be composed of all those who invest in them either labor, money or property, and will be organized in the following manner:

First. There will be issued to the investor of money or property, capital stock, of a par value equivalent to the money invested, or the value in money of the property invested. This capital stock will have as security exclusive title to all the property of the corporation. The security for money or property investment will then equal the principal investment from the beginning, and will constantly tend to exceed the actual investment as additions are made to plant or capital retired out of net earnings. The stock should be assignable and transferable, and should be voted by its owner in person, not by proxy. It will bear a limited, preferred and cumulative rate of dividend, corresponding almost exactly with the ordinary issues of preferred stock by existing corporations. The owner of preferred capital stock will cast one vote for each share held by him.

Second. For investors of money or property who desire only security and constant returns, and who do not care to assume any of the risks of the industry, nor to share the responsibility of its management, there may be issued bonds, of a par value equivalent to the amount of the investment, having a lien upon the property of the corporation ahead of the holder of capital stock, and bearing a lower rate of interest, commensurate with the enlarged security. The bond investor will have no voice in the control of the corporation nor any share in its net earnings. He lends his

capital to those who conduct the industry and are responsible for its efficiency, and his claim upon the industry is fully satisfied by the guaranty that his principal will be returned intact and by the annual interest paid for its use. On the other hand, the holders of capital stock, labor and the public will share equally the benefits of having capital at a low rate of interest.

Third. There will be issued to every investor of labor—to every employee of the corporation, whether employed as laborer, manager, official or in any other capacity—a "labor stock," of no par value, having no claim upon the properties of the corporation—title to which is security for money or property investment—non-assignable and non-transferable, and valid only during the course of the holder's employment. Labor stock will carry the voting privilege, on the basis that the employee whose salary or wage is a thousand dollars a year will have a voice in the affairs of the corporation equal to that of an investor of money or property whose preferred dividend is a thousand dollars a year. Labor investment should be secured by insurance, provided by the corporation and made a charge upon gross revenues, on the basis that the value of labor that is paid a thousand dollars a year is equal to the value of the property or money capital that earns for its owner a thousand dollars a year.

Fourth. Wages and salaries will be paid out of gross revenues, before preferred dividends are paid. The holder of capital stock will have a first lien upon net revenues for the payment of preferred dividends after all operating costs, including wages, maintenance, insurance and interests on bonds, have been paid, and provision made for depreciation, and retirement of bonds. Any excess of earnings remaining shall be declared surplus, and shall be divided into two equal parts—one half to be designated as

corporate surplus and the other as public surplus. The corporate surplus being the property of the corporation, may be expended by it in any manner determined by its stockholders, both capital and labor; but, if distributed as dividends, stockholders of either class shall share in the distribution in the proportion which the investment of each bears to the entire investment, both of labor and of money or property. That is, an employee whose salary or wage is a thousand dollars a year shall receive the same share of surplus as the holder of capital stock whose preferred dividend is a thousand dollars a year.

The half of excess earnings designated as public surplus will be expended: first, for improving or extending plant or facilities; and second, for the retirement of capital. If capital is retired, the stock shall be paid for at par, with a fair premium added to compensate its holder for the inconvenience of changing the form of his investment. If in any year there should be a deficit, it shall be made up out of surplus. If there still remains a surplus after meeting all these needs, the corporation shall, for the following year, reduce the prices of its products so as to absorb such surplus.

Fifth. In order to guard against any possible exercise of corporate privilege to the detriment of the public welfare, the proposed corporation will be subject to public regulation and supervision, with regard to the keeping of its accounts, the maintenance of the integrity of investments, and the disposal of public surplus. It will be required to keep all its accounts in the manner prescribed by such federal, State or municipal board or commission as may be created for that purpose, which shall have full power to prescribe methods of accounting, to determine what part of gross revenues shall be set aside each year to cover depreciation or to provide for labor insurance—so as to protect

the integrity of both kinds of investment—and to require from time to time such reports of the activities of the corporation as may be deemed to be of public benefit or necessary for the protection of the public interest. It shall have full power at all times to inspect books and records, to check accounts and to audit expenditures. The corporation will be required to submit to such board or commission at the end of each operating year its annual balance sheet, showing on one side its total production and on the other its total cost of production, including all amounts paid for materials, wages and salaries, maintenance, depreciation, taxes, bond interest and sinking fund, and property and labor insurance. If there are any net revenues remaining, the board or commission will order the payment therefrom of preferred dividends on capital stock, at the rate carried by such stock; and, if there is any surplus remaining after the payment of preferred dividends, it shall order that such surplus be divided, one half as public and the other half as corporate surplus, and shall determine the disposal of public surplus as herein provided. The board shall also have the power to enforce the provisions governing the distribution of corporate surplus.

This is a complete statement of the plan for industrial democracy—for the organization of industry on a basis of economic efficiency and individual and social justice. In the light of the previous analysis of industry, the plan is practically self-explanatory. It classifies industries with regard to the several industrial interests, making provision for the ownership, control and operation of public utilities in the common interest and for the common protection of the people, and for the equal service of all industries dependent upon public utilities. It provides for effective coöperation within each industry, and a public policy for the control and coördination of all industry. It balances production with

consumption, by distributing profits and thus preventing the impairment of buying power and the resulting curtailment of production. It gives equal protection to the rights of labor and the owners of capital, by treating both labor and capital as investments, by securing the integrity of both labor and capital investment, by giving the investor of capital or the investor of labor a share in control proportionate to the value of his contribution to the industry, and by providing for the distribution of the product on the same basis.

This plan will give to every individual the absolute disposal of his own labor or the fruits of his own labor; and from this very fact it will reconcile the conflict between "capital" and labor. It protects the right of the consumer to have the highest possible satisfaction of his wants at the lowest possible cost, by providing for maximum efficiency in production. In short, the plan fulfills all the requirements for an industrial organization that will secure both economic efficiency and individual and social justice—a plan under which we shall order our industrial affairs in accordance with the fundamental principles that ought to govern all the relations of human beings to each other.

Any further detailed analysis of the plan would lead us back over the ground we have already covered in the preceding chapters, and would of necessity be somewhat technical and abstract. Carrying with us the results of the preceding analysis of industry, we can best understand the several provisions of the plan by considering its application in particular industries, and to the solution of present industrial problems. We shall, therefore, proceed to show its application to transportation, as being at this time the most important of the public utility industries; to the mining and distribution of coal, as representing basic industries; to agriculture, which is the most fundamentally important

of all our industries, and which is the industry most largely under individual ownership and control; to marketing and credit, as being essential to all other industrial activities and especially to agriculture; and to the reconciliation of industrial disputes, which must be accomplished if we are to prevent the destruction of our industries.

XII

TRANSPORTATION

A BASIC industry is one that is vital to the carrying on of all other industry. Such are the coal industry, the development and distribution of hydro-electric power, transportation, marketing and the distribution of credit. Agriculture is a basic industry, in the sense that it supplies most of the food that sustains the lives of workers in all other industries, as well as a large part of the raw materials for the manufacturing of clothing and other necessaries for the use of other workers. In this same sense, though in a lesser degree, metal mining and lumbering are basic industries. But under modern conditions these industries will thrive if properly organized within themselves, and if efficient services in the first group of basic industries are provided. Agriculture, as now organized, has, indeed, proved its efficiency by producing more than the transportation and marketing and credit systems can carry over to consumers; and metal mining, lumbering and similar industries would be efficiently operated under the plan proposed for coöperative industries that are not public utilities.

As will be shown in a later chapter, the establishment of industry on a democratic basis will itself largely remove credit difficulties, by preventing the accumulation of profits that is made the basis of credit monopoly. Marketing is so closely related to and dependent upon transportation that the providing of an efficient transportation service will go far towards solving marketing problems. The democratic organization and operation of marketing facilities

will assure efficiency, eliminate excess profit and distribute benefits equitably between producers and consumers; and the people may at any time declare any marketing service a public utility, and provide for its ownership by the State or the nation, and its operation by those who create and are responsible for its efficiency. But transportation has already proved to be so vital, not only to all other industry, but to the comfort, health and safety of the people, that it is universally recognized to be a public utility. The private ownership, control and operation of transportation in this country has proved so disastrous a failure that its reorganization and operation as a public service, and not for private profit, is an immediate and imperative necessity.

In the United States we depend for transportation almost entirely upon railroads. Other countries have, or have had, their natural or artificial waterways. In the course of human progress, civilization after civilization has sprung up on the shores of oceans, seas or navigable rivers, and these civilizations have prospered and grown great on water-borne commerce. They may have been aided by railroads, after they have established themselves, but they have not been built on railroads. It is different in the case of the United States. This nation is an experiment in railroading. England tried to keep it in the position of a maritime colony—a mere feeder to the commerce of the mother country, across three thousand miles of ocean—but the colonists soon perceived that their future lay in the vast interior, with its rich and apparently inexhaustible agriculture, forest and mineral resources.

From the very beginning the importance of the problem of overland transportation was recognized by the founders of the American nation. It was for this reason that the control over interstate commerce, including the control over interstate transportation, was given to the federal govern-

ment by the federal Constitution. It may be that the people have depended too much upon the railroads as the solution of their transportation difficulties, to the neglect of the development of waterways. It may be that in the near future the building of improved highways and the development of truck transportation will greatly lessen our dependence upon rail transportation, and tend greatly to relieve congestion when traffic is in excess of rail capacity. But it is practically certain that for years to come our chief dependence will be upon railroad transportation. Highway transport will be supplemental; and waterways will always require rail connections. We can not change the fundamental geographical structure of our country. Overland distance will always be great. The utmost possible development of waterways will still leave us chiefly dependent upon railroads for the transportation of the greater part of the products of industry.

Now that the wilderness has been conquered, our dependence on the railroads is not less but greater. Because of their great development, we have become more dependent upon each other. Without the railroads, a farm in North Dakota, a cattle ranch in Wyoming, a copper mine in Utah or Montana, an oil well in Oklahoma, or an orange grove in California is worthless. Without the railroads, the great majority of the coal mines would shut down and remain closed. There would be fuel neither for heating our houses, generating electricity for lighting our dwellings and our cities, nor for power for carrying on our industries. Let railroad transportation cease, and within two weeks the children of every great city would die, as of a pestilence. Even a faltering of transportation means a paralysis of industry; it means industrial losses that will soon consume the profits of years of constructive building. It means panic, disaster, famine and death.

More than thirty years ago the farmers of the Middle West began to complain of extortionate charges, discriminatory rates, rebates, and corruption of legislatures and courts by railroad interests. For a long time, the railroad interests hardly condescended to reply; and when they did, it was to point to the importance of the service of the railroads, and the dependence of the people upon them—and to claim the right to run them as they pleased. They claimed all the privileges and immunities that attach to private property, and at the same time clung to all the privileges and immunities granted to them by the public. They claimed that they were entitled to a guarantee on their investment, and at the same time that they should be left to take all the profit they could get out of their services. They claimed, as of right, and to dispose of as they pleased, the vast grants of land they received from the federal government, and the franchises, bonuses and immunities they obtained from State and local governments. At the same time they denied the right of the people to prescribe or to regulate the services they should perform.

The earlier railroad magnates made little attempt to conceal their contempt of the rights of the people. "Of course the railroads were run for profit. What were they supposed to be? Charitable institutions!" "A railroad makes a mistake that does not leave the farmers enough for seed," said Jay Gould, according to a story told and believed throughout the Middle West. "If the people think passenger rates too high, let them walk," said another railroad magnate. Even "Jim" Hill, who acquired and doubtless earned the reputation of caring more for the interests of the people than any of his fellows, frankly regarded farming, mining and lumbering as feeders to his railroads, rather than the railroads as services to these industries. It

was a railroad magnate who said: "the public be damned."

Some of that early arrogance has come down to our own times. It persists in the face of the failure of the railroads to perform the function for which they were created. Even while begging for subsidies at the doors of the public treasury, those in control of the railroads deny the right of the people to prescribe the services they shall perform, or to take measures for the protection of railroad employees or the public against their extortions.

But few of these who earlier complained of the arrogance and injustice of the railroads ever supposed that the time would come when the chief cause of complaint against them would be on account of their inability to discharge the service for which they were created. Few, if any, of the owners and managers of the railroads themselves saw it; and those who did attributed the weakness of the railroads to the perversity of governments and the agitation of "wild-eyed populists" and similar so-called cranks. None saw that the trouble with the railroads is due to the magnitude and importance of their task, and to the fact that so great and vital a public service can not, without inviting disaster, be left in the control of private interests, to be operated solely for private profit. The truth is that, as now organized and operated, the railroads must fail whenever there is any considerable increase in traffic. That is, they fail whenever industry is expanding, and in proportion as industry expands. They can not carry the load, except in times when industrial depression reduces it to less than normal; and in such times, because of industrial depression, the traffic they are able to handle can not be carried at a profit. So that the railroads fail, whether there is prosperity or panic; and fail most disastrously when, but for their failure, there would be general prosperity.

There were car shortages and railway congestion prior to 1890. This crisis ended with the beginning of hard times in 1893. There was another railway crisis in 1907, which was a time of business expansion and industrial prosperity. So it has gone from 1907 to the present time. Always the railroads fail when industry is prosperous and business expanding. There was a car shortage at the end of 1912, a slighter one in 1913, and then, at the end of the period 1914–1915, "like magic" the demand for shipping facilities overwhelmed the carriers. The condition continued throughout 1916, 1917 and part of 1918, and "was accompanied"—according to a prominent railroad president—"by much suffering and a partial paralysis of business and a threatened stoppage of transportation." It is to be noted that this last period of inadequate transportation facilities began a year before we entered the war. It was not due to the war, but to industrial prosperity and business expansion, which was the result of the European war and which might have been even greater if the railroads could have carried the goods produced, and for which there was a market.

The tendency of industry to outgrow transportation facilities was noted by Mr. Herbert Quick in 1908, in his book on American Inland Waterways, in which he accurately forecast the subsequent history of the railroads:

"The outlook is made more interesting—not to say more ominous—by the tendency of business to grow to the limit of any increase in railway facilities. The tonnage will in all probability be doubled in ten years of [railway] rehabilitation. Good agriculture in the Mississippi valley would break the railways' backs with freight. North Dakota, for instance, grows only half as much wheat an acre as Connecticut, while she should produce twice as much. Coal and iron are almost certain to double in ton-miles. Building materials are sure to be heavier. The nation's traffic yielding 79,000,000,000 ton-

miles in 1890, 141,000,000,000 in 1900, and 197,000,000,000 in 1905, will, unless retarded by industrial depression, call for the carrying of from 350,000,000,000 to 400,000,000,000 ton-miles in 1916."

Recent official figures show that Mr. Quick was conservative in his prophecy.

These statements are fully substantiated by official documents. In its 1916 report the Interstate Commerce Commission says:

"The inability of shippers to procure cars for the movement of their traffic is the subject of numerous and grievous complaints, which come to the commission from all parts of the country. A car famine prevails which brings distress in almost every section, and in some localities amounts to almost a calamity. The development of industry has of late been much more rapid than the increase of railroad facilities. The conditions now existing in the Northwest, where large quantities of grain require immediate shipment, and in the Southwest and the trans-Missouri region, where thousands and tens of thousands of live animals are denied movement to markets, may justly be regarded as alarming; while throughout the Middle West and Atlantic seaboard the shortage of cars for manufactured articles has become a matter of serious concern. In some cases, it is simply a lack of cars, in others insufficient tracks, in still others inadequate freight yards and terminal facilities."

Again, in 1907, the Commission says:

"The whole problem, involving insufficient cars and track capacity, congested terminals, slow train movements and other incidents, may be said to be due to the fact that the facilities of the carriers have not kept pace with the commercial growth of the country.

"During the last decade the commercial condition of the country has been one of increasing prosperity. If business undertakings proportionately increase during future years, the railroads of the country must add to their tracks, cars and other facilities to an ex-

tent difficult to estimate. The ability of the carriers to transport traffic measures the profitable production of this vast country. Manifestly it is an economic waste for the farm, the mine or the factory to put labor and capital into the production of commodities which can not be transported to market with reasonable dispatch. If the present output can not be transported except after ruinous delays, it is unreasonable to presume that capital will readily seek investment in new undertakings. It may conservatively be stated that the inadequacy of transportation facilities is little less than alarming; that its continuation may place an arbitrary limit upon the future production of the land."

Then, in 1908, the Commission refers to the fact that diminished revenues during periods of depression prevent the railroads from preparing for the greater business of periods of prosperity.

"The temporary financial depression," says the report of the Commission, "from which the country is now suffering, resulted in the diminution of railway revenues. The diminished volume of traffic moved by the railways in the slack period which began in 1907 must not be forgotten."

Thus the cycle was completed. The railroads could not handle the traffic when business was plentiful, and for that reason checked all prosperity, including their own; and in the resulting period of slackness suffered deficits in revenue because of the lack of traffic. During this crisis, James J. Hill estimated that it would require $5,500,000,000 of capital and years of time to equip the railroads to handle the volume of traffic then offered, to say nothing of increases. It is astounding that with all this evidence of the impending bankruptcy of our most vital national industry—the industry upon which all other industry and business most depend—we should have left the railroad problem to fall into the hands of financial interests that know nothing about operating railways, and that confess that they have

managed this vital public service wholly with a view to private profit.

The final, conclusive evidence of the inability of the railroads to handle the traffic of the country came at the beginning of the war. It must, of course, be admitted that the war laid an extraordinary burden upon the railroads. We could hardly have expected them to be able to move the ordinary traffic of industry, plus troops and war supplies, without a great deal of inconvenience to the public, and some measure of failure to meet all the requirements of the government. But the railroads failed almost before our military operations had begun. When the government took over their operation, tracks were congested with freight cars for a hundred and fifty miles westward from Atlantic seaports. Cars loaded with war materials and supplies that had been due for loading onto ships at Eastern ports for two months were still buried in the yards at terminals in Chicago, St. Paul, or other points from a thousand to two thousand miles from their destination. In one instance, a division superintendent admitted that cars due to be sent east three weeks earlier could not be dug out of a Western freight yard within another three weeks. "And when we get them out," he said, "they will only be buried again at the next terminal." In this instance, the cars need not have been halted at all, so far as any physical difficulties were concerned. They were shunted into the yards, instead of being directly attached to accessible out-going trains, because a certain road had control of switching at that terminal, and insisted upon its prerogatives. A few weeks after the government took control, it made certain connections between the tracks of different railroad companies, outside the yards, so that through east-bound freight cars never went into the "grave-yard" at all. Under the management of the government, similar connections were made

at hundreds of places throughout the country. In one or more instances, parallel transcontinental lines were operated as one double-track railroad. Devious routings of cars were eliminated. Freight and passenger offices were consolidated; and as a result, within an astonishingly short time, congested yards were cleared, and both war and general freight was moving with reasonable speed to its destination.

Railroad interests have persistently represented that the government returned the roads to their owners in a bankrupt condition. But railways interests have never presented convincing evidence to maintain this contention. On the contrary, all the evidence that can be gathered from their own reports tends to the opposite conclusion. The outstanding and conclusive fact is that the roads could handle, and were handling, more traffic at the end of the war than at the beginning, and this at relatively less cost.

But it is not our purpose to defend government operation of the railroads. On the contrary we shall assume that no one wants in times of peace a policy of railway operation such as we had during the war. From the very fact that war existed, creating a transportation crisis, it was not a test of government operation under normal conditions. In fact, it was not government operation at all. It was company operation, under government administration and direction. We hold no brief for or against government operation of public utilities, being content to set forth and explain the merits of our plan, which provides for public ownership and democratic operation. We cite the war history of the railroads only to complete the evidence of their increasing inability to perform the functions for which the people created them. Leading railway experts agree that the roads can not carry even a normal traffic. The in-

stances of breakdown that we have cited show conclusively that they can not carry the "peak loads" of periods of industrial prosperity; and the acknowledged condition of the roads at the end of 1917 is sufficient evidence that in the face of a serious crisis like that of war, the utter collapse of private control and operation is inevitable.

We are now in a position to set down the causes of the collapse of the railroads. First, we must not forget the tremendous physical obstacles that had to be overcome—the tremendous distances, heavy grades and other natural difficulties. Next, there is the economic problem—the geometrical increase in traffic, with its variations between the highs and lows of industrial expansion and depression. These are primary and fundamental facts in the nature of the situation. They are elements of the problem that cannot be eliminated by any policy or method of control, management or operation. They will be present under private or public, autocratic or democratic ownership or operation. They are the facts to which we must adjust our transportation policy.

But there are causes not inherent in the physical situation. These are:

1. The Arrogance of Railway Owners and Managers: their contemptuous disregard of the rights or the welfare of the people. Associated with this is their disregard for law, their corruption of legislatures and courts and their persistent propaganda through the press for the control of public opinion in their favor. The railroads complain that the people do not understand them: they have themselves been the most persistent disseminators of misunderstanding and of prejudice. The history of the railroads seems to indicate that if the people had really understood the railway interests and their motives, the present system of control would have been abolished years ago.

2. Inefficient Methods of Distributing and Handling Traffic. Experts who have analzed the car-shortage problem say that it is not so much a question of cars, as a question of their proper distribution. Cars congest in certain parts of the country where they are not needed, while other sections are suffering heavy losses because their products can not be moved. Cars congest on main lines, while there are not enough on branches to feed the main lines. Terminals are "the grave-yards of freight cars" in times of traffic congestion. A lack, or a wrong distribution of motive power is a fruitful cause of traffic congestion and car shortage. Car shortage is aggravated by favoritism shown to certain shippers, who are sometimes allowed to retain loaded or empty cars indefinitely. Uneconomic routing, to increase freight charge, or to protect the privileges of certain lines, is another prolific breeder of trouble. Other causes are under-loading, over-loading, hard usage, inefficient repair service and over-working of employees. All of these conditions are chiefly, if not wholly, due to inefficient management or to the adoption or retention of wasteful or ineffective methods. Their cure lies within the compass of railroad policy.

3. Lack of Coördination. In normal times, transportation costs are tremendously increased by the fact that there is little or no coördination among the railroads. With 1800 separate and independent railway lines we can hardly be said to have a transportation system. We have instead a chaos of conflicting and often directly antagonistic interests. Private quarrels among railway interests, sometimes of a purely personal nature, have often been allowed to endanger the interests and even the lives of entire communities. Combinations have been made or dissolved with little regard for the public interest, and often for the direct exploitation of the people. But even if railroad policy

were always ruled by the highest of motives, it would be utterly impossible to coördinate these 1800 private lines into a single, unified transportation service, devoted to the sole purpose of carrying the traffic of the nation's industries.

4. Financial Difficulties. We have seen that the railroads are unable to accumulate, during periods when they can carry the traffic, surplus enough to finance the heavier operations due to industrial expansion and prosperity. They can not get ahead during slack times, because there is not business enough fully to employ all their equipment; and they can not accumulate a surplus during periods of prosperity, because the traffic is so heavy that the expenses of slow movement and congestion eat up excess receipts. It seems, therefore, that there is a fundamental financial difficulty that can not be overcome by any method yet suggested or devised. But somehow most of the roads continue to pay dividends, both during slack periods and during periods of excess traffic. Herein lies the chief source of the financial difficulties of the railroads.

5. Overcapitalization. The railroads claim a "property-investment account" upon which formerly, when they denied the right of the State or the national government to "interfere" with their business, they claimed the right to earn dividends, and upon which they have lately demanded a guaranty of a return of six per cent. This "property-investment account" is perhaps the greatest source of the difficulties in which our railroads are involved. It is not even claimed that there is actual physical value in the roads to any such extent. The very fact that the owners demand the fixing of rates high enough to bring a six per cent return is in itself evidence that they do not expect that the roads could earn it on an economic rate-basis. There are, of course, no competitive rates. So that all that can be done is to fix rates where it is believed they will earn the

required per cent., and then, if they do not, to raise them higher. Naturally, under such a policy, little attention will be given to the elimination of waste and the increasing of efficiency so as to increase net earnings. Little attention is given to the economic principle that a lower rate may earn more than a higher rate, or that high rates may kill traffic entirely, defeating the very purpose for which rates were advanced, and thus causing industry to stagnate and bankrupting business.

What is this "property-investment account?" It is merely a bookkeeping entry to balance the par value of the securities the railroads have issued. It is well known that in many instances they have issued bonds of a par value greatly in excess of the money received from their sale, and that large blocks of stock have been given as bonuses to the purchasers of bonds. Clearly, the amounts received from the sale of securities represents the money investment, while the par value of the securities represents the face of the liabilities incurred.

Thus, in demanding rates that will yield a certain return on their "property-investment account," the railroads are demanding a guaranteed profit on their liabilities—not on their money investment. This may seem an astounding proposition, but the fact is that a railway corporation has nothing else upon which to base its claim for profits. From the financial point of view, the fact that this "investment account" does in part represent actual money invested, use-value of their actually existing property, is a mere incident. Railroad securities were formerly issued on the basis of what the owners and managers estimated they could get out of the public—not in fair and honest competition, but under the monopoly they enjoyed by virtue of their grant from the public. More lately they have often been issued to increase the basis upon which the roads could

rest claims to have rates allowed that would yield a fixed return. Thus, in practice, the "earning" assets of the railroads have always been their liabilities. The greater their debt, the greater the volume of their guaranteed profits.

Meanwhile, the actual money invested is included as an additional basis for the issuance of securities. All betterments made, either out of money originally invested or out of earnings, are thus capitalized, as a basis for still higher charges. Though tracks and equipment have been renewed over and over again, out of the earnings or out of new capital, no capital is retired. In the past eighty years, no railroad has ever paid off an indebtedness except by creating an equal or greater indebtedness.

"Therefore [as the representatives of the railway employees said in protesting against the rate provisions of the present railway law], the money paid for rails, ties and equipment in the days of our grandfathers, still demands its return in the present rates.

"We are still paying for the use of locomotives long since sent to the scrap-heap. We are paying returns on the shades of ties that have been ashes for generations. Rails that have been replaced half a dozen times demand from us the earnings paid by our grandfathers. The 'property-investment account' of the railroads is nothing but a whited sepulchre, full of corruption and dead men's bones. Within this charnel house we find billions of shadow dollars, representing shadow certificates of stock that never meant anything in service to the public. This coffin of the past they now drag into Congress and demand of the people that it be made a living thing by a guaranty of six per cent on the total sum of its dust and corruption, in order that the 'faith and credit' of this empty grave may be reëstablished amongst men of this generation, and fastened upon our children and our childrens' children to the end of time."

What is the true investment value on which the railroads are entitled to a "fair" rate of return? It has been contended that physical valuation should be either the sole

basis, or an important factor in the determination of such value. But what is the measure of physical value? Economically, it is its value in exchange for other property. And both in economic theory and in ordinary business practice, value in exchange depends upon the use that can be made of, or the profit that can be derived from, the thing exchanged. There are just two things that give such value to railroad property: the powers and privileges that go with the grant from the public, and the actual service the railroads perform for the people. But the grant is not the property of the railroad corporation; the powers and privileges conveyed in it belong to the people, and can be exercised only by the particular corporation to which they are granted, and under the restrictions and limitations expressed in the franchise. This value can not be alienated. It can not pass from the corporation holding it, except back to the source from which it came—the State or the nation, representing the sovereignty of the people. No purchaser would pay even the amount of the money actually invested in the railroads for their present physical property, unaccompanied by the grant from the public. In fact, properties would hardly be worth more than junk prices without it.

But the railroads are not willing to accept physical valuation even on the basis of what they can earn under their franchise. The apparent reason is that its acceptance might reduce "property-investment account" even below what it would be if it were based on money actually invested. The figures thus far given out by the Interstate Commerce Commission in the course of its valuation of railroad properties indicate that the final value of all the roads will be less than the valuation of investments "honestly and prudently made," as computed by the Railroad Brotherhoods, in the advocacy of their plan for

democratic operation. They estimate a probable value of $12,000,000,000. The Commission's figures forecast a physical value of less than $10,000,000,000.

But even the investment "honestly and prudently made" has no necessary relation to the value of the services rendered by the railroads. An investment prudently made—that is, in accordance with the actual needs of the industry—might have been entirely wasted by subsequent misfortune or mismanagement. The present ability of the roads to render service might be far less than would be measured by the value of the original investment. No private industry has any claim upon the public to have the value of its investments kept intact; nor has the investor in any private enterprise any such claim. The railroads can claim the protection of their investment value, only on the ground that they are public utilities, rendering such services to the public as will justify it in giving such protection.

The trouble is that we have nothing by which to measure the value of services. We have seen that they can not be automatically determined by free competition, because the service is in its nature a monopoly, that is recognized and protected as such by the grants to the railroad corporations. The present law provides for the fixing of rates that will yield a certain return upon a valuation that represents liabilities, rather than assets, and liabilities that are not balanced by assets. Or, rather, the rate that is allowed to be charged is the asset that is counted upon to cover all the liabilities of the railroads, including the profits they claim they are entitled to. They do not ask for profits proportionate to a certain service. They claim the privilege of making certain charges that will cover certain profits a condition of rendering any service at all. Therefore, neither the original investment, present physical value, exchange value, nor use value is or can be made a basis

for rate-making. None of these factors is determinate; therefore, it is nonsense to talk of defining any one of them in terms of any of the others.

Use is the true measure of the value of the service of the railroads to the people. But the public itself contributes an important element to that value, in the grant it makes to the corporations. The people have a right to claim service in return for that grant. The corporations are not entitled to take any profit on the contribution to service made by the public. They are obligated on account of the grant to supply the best possible service at the lowest possible cost, including in cost a fair return on the labor and money or property actually invested and beneficially used in the industry.

6. **Industrial Warfare in the Railroad Industry.** We have, under our present policy of administering our railroads, no measure of the value of either capital or labor contributed to the service. Rates being fixed to cover all costs of operation, plus a fixed return on investment, there is a constant temptation to make every item of either costs or investment as large as possible. Labor is forced into the position of contending, not for a wage measured by the value of its service, but for its share of the charge exacted from the public. Wage agreements favorable to labor have the effect of fixing an additional labor charge upon the public, that must be covered in increased rates; while decisions against labor that lower costs, may be capitalized into future bond or stock issues, and made the basis for greater returns on capital investment. Meanwhile, each party to wage-controversies tries desperately to justify itself to the people. But neither is responsible for efficiency; neither can be responsible for efficiency, under the present system, because neither has the power to determine policy, and there is no method by which to distribute rewards ac-

cording to the value of services rendered. Futhermore, there can be no efficiency without coöperation, and effective coöperation between control and management on the one hand and labor on the other, under the present policy, is impossible.

The railroad industry has been from the first a breeder of industrial strife. In an industry operated under a policy that made it impossible to measure wages in terms of services rendered, labor has been forced to wage a continual battle for barely tolerable working conditions and for a minimum living wage. Through their legislatures and their courts, the people have striven to protect their industries against exploitation by means of unfair discrimination and extortionate charges for services. The railroads, controlled and managed by those who have capitalized the money actually invested, the labor contributed, and the needs of the people in their own interest, have resisted both the efforts of labor and the efforts of the public. They have been more powerful than organized labor; they have often been more powerful than the people. They have largely shaped railroad legislation, both in the States and in the nation; and there have been suspicions—by no means entirely groundless—that they have more than once corrupted our courts. Thus, those who have controlled this vital public service have used it to oppress labor, to exploit the industries of the people, and to corrupt their political institutions. This is not coöperation. It is not democracy. It is industrial warfare, under conditions in which powers granted by the people of a democratic nation are employed for the purpose of destroying democracy.

7. **Control by Bankers.** A natural and inevitable result of the subversion of the railroads to investment interests is that they have passed under control of bankers. Bad as were, in many ways, the policies of the "captains of indus-

try" who formerly ruled over our transportation system, they at least had a sense of the greatness of the work they were doing, and measured success in terms of accomplishment, rather than in terms of money profit. These men kept themselves close to the actual work of running the railroads, and many of them honestly believed that they were performing services for the people that justified their arrogant disregard of their rights, and their contemptuous breaking of the laws enacted by the people's governments. But bankers, from training, interest, and inclination, are but little concerned with the service that the railroads should perform. They are concerned with the collection of interest or dividends on the charges vested against this service. They need not trouble themselves with the question whether or not the railroads earn interest and dividends, by rendering services to the public, so long as they can have both covered in the rates charged for services. They need not concern themselves as to whether the roads are solvent or bankrupt, since it appears that the greater the burden of bond and share liabilities that has been piled upon them, the greater will be the charge to the public, and the more will be the interest and dividends that they can collect.

But while bankers control the railroads in the interest of investments, they do not necessarily control them in the interest of investors. The greater the load of inflated investment piled upon the roads, the less is the value of honest investments in them, and the more the security behind honest investments is impaired. The rate guaranty for returns on investment weakens incentive to efficiency. It removes the necessity for maintaining the earning power of the roads, and thereby endangers their property value. At the same time, all the shares issued, whether they represent money paid in, or whether they consist entirely of water, are a charge against net revenues; and all the bonds

issued are secured by total property assets. So that every increase in share or bond capitalization, without a corresponding increase in efficiency and property value, impairs the security and the value of real investment. Of course, the railway interests demand rates that will cover returns on actual investments; but they also demand that those rates cover fictitious investment. In fact they could not do otherwise. Once the securities are issued they become a charge against the property or the earnings of the roads, regardless of the manner of their origin. Furthermore, many of these securities have passed into the hands of third parties, who are in no wise responsible for the motives determing their issuance; and these innocent investors must suffer from every impairment of the value behind their investments. Those who control the railroads see this; but they do not know, or they choose to ignore the fact, that a guaranty of returns by the fixing of rates is an unstable security for investments. It is unstable and dangerous to the value of investments, because it encourages the piling up of charges to be met out of rates and not out of increased efficiency, and thus destroys the incentive to efficiency, which alone can give real value to the securities. Under this practice, nothing else is to be expected than a progressive decline in the efficiency of the railroads; and that will mean a progressive increase in rates, until industry will not be able to pay them. With regard to many industries, that point has already been reached. Any further addition to rates would kill the industries, and thus cut off the revenues of the railroads entirely. When that point is reached in all industries, obviously there will be no revenue out of which to pay interest or dividends, and all railway investments will be valueless.

The first serious effect upon investments is felt long before rates have reached the level where they will decrease

revenues to the extent that they no longer cover investment charges. It is shown in an impairment of the market value of outstanding railroad securities, and in the increase of the rates of interest that must be paid on new issues. That these facts are known to the financial interests that control the railroads is shown in their public statements and in their testimony in rate-hearings. In 1920, in the course of a hearing before the Interstate Commerce Commission, Mr. Frederick Strauss, a New York banker and railroad director, testified as follows:

"The great insurance companies have most of their security investments in railroad bonds. Many billions of these are held, and the insurance companies reach many homes. There ought to be left in the minds of the policy holders no doubt as to the safety of these investments.

"The most important principle of all principles of sound finance is that the superstructure of credit shall rest upon an adequately firm basis of capital. . . . Increase in the superstructure of railroad credit, without increasing the actual base on which that credit stands is to increase the instability of the financial superstructure and to cause a constantly increasing proportion of fixed charges, until an ever-growing doubt is entertained in the minds of investors, as to the ability of the companies to meet their growing fixed charges."

As to the actual effects that have followed such a policy, Mr. Strauss said:

"Even the best railroad bonds now invariably carry high rates of interest, and roads the bonds of which have heretofore been looked upon as safe investments are utterly unable at the present time to sell any bonds whatsoever. Prices of railroad securities have been sagging. The lower they go, the harder it will be to restore them to their former level. . . . The return of six per cent. per annum will, I believe, turn out to be wholly inadequate, as time will tell."

Mr. Strauss proceeded to say that railroad bonds could not then be sold at par unless they bore interest rates of from seven to seven and a half per cent. He said that increasing the interest rates on bonds to be issued could in no wise increase the market value of the bonds already outstanding, but would have the opposite effect; that upon all bonds bearing the lower rate of interest, maturing in thirty or forty years, the effect would be to depreciate their market value by the difference between their interest rate and that of the new securities.

But what is the "basis of capital" supporting both old and new issues of railroad securities? It is the guaranty afforded by the rates fixed under the present law. That the bankers so regard it, is clearly indicated in Mr. Strauss's testimony. It is not the physical or the exchange value of the property of the railroads, nor is it the value of their services to the public—their economic earning power. It is a charge upon industry, measured by the entire valuation of all the obligations of the roads, that, increasing as these obligations increase, must at no distant date exceed the ability of industry to pay, thus cutting off the revenue of the roads and rendering worthless all investments in them.

There should be no wonder that, under these conditions, the railroads are unable to finance the betterments and new construction necessary to enable them to handle the traffic produced by our industries. There are more than eleven billion dollars' worth of outstanding railroad bonds. Complete physical valuation will be less than ten billions; so that the property security of the roads is less than their present bonded indebtedness. Bond holders must depend for their interest on the allowing of rates high enough to pay costs, plus interest. The rates on many primary commodities are already so high that industry is nearly stifled. And if industry does recover and expand at a

normal rate, the railroads will not be in a position to handle the increased traffic, because they will not have been able to sell the necessary bonds in order to get the money to pay for new equipment, repairs and construction. It is not, therefore, alone a question of the willingness of the people to submit to higher rates. Industry can not recover, if the high rates remain, and the railroads can not finance themselves to handle the traffic that would be produced by a recovery of industry, unless the rates remain, or are raised even higher. The railroads are forced to choose between the two horns of a financial dilemma, either of which will gore them.

The strongest supporters of the railway corporations admit the seriousness of this situation. It is recognized by all financial, economic, and business experts. Not long ago, Mr. C. W. Barron of the *Wall Street Journal,* ascribed the economic collapse of Europe and the industrial distress of this country to "the breaking down of transport," meaning to include both the carrying of goods and the transfer of credit. Both of these failures are exemplified in the railroad situation. In a statement recently made before the Interstate Commerce Commission, the Secretary of Commerce said:

"If we look at the national economic situation as a whole, the greatest impulse that can be given to recovery . . . is a reduction of rates on primary commodities, combined with the immediate resumption of railway construction and equipment. The first depends upon reduction of operating costs, the second on restoration of credit.

"One thing is absolute: Our transportation facilities are below the needs of our country, and unless we have a quick resumption of construction, the whole community—agricultural, commercial and industrial—will be gasping from a strangulation caused by insufficient transportation, the moment that our business activities resume.

"Few people seem to realize the amount of expansion of our transportation machine necessary to keep pace with the growth of the country, and an equally few seem to have any notion of the price we pay for not having it. . . . There would be no difficulty whatever, by basing such losses on the experiences we have already had, to calculate a loss of $1,000,000,000 for each one of these periodic transportation shortages.

"There is nothing that is so irrecoverable a loss to the nation as idle shops and idle men. To-day we have both. There is nothing that will so quickly start the springs of business and employment as an immediate resumption of construction and equipment of the railways. When business does resume, we shall need all of our capacity for the production of consumable goods. We shall not only find it strangled for lack of transportation, but we shall find ourselves plunging into the manufacture of this very railway equipment and construction in competition with consumable goods for materials and labor. Herein lies the basic cause of destructive price inflation and booms, with all their waste and over-expansion."

But Mr. Hoover does not grasp the real cause of the failure of the railroads to finance reconstruction and reequipment. "Surplus capital," says the Secretary, "is pouring by hundreds of millions monthly into tax-free securities and foreign loans, and yet our railways are unable to finance the most moderate of construction programmes. . . . If American railways can not earn interest on their borrowings, let us throw up our hands and prepare for a second Russia."

Money goes into tax-free bonds, chiefly because the public credit is behind them. It is not wholly or chiefly because they are tax-free. The tax-free element, in the long run, raises the prices of the public securities and thus redounds to the advantage of the governments and municipalities issuing them. The proceeds of these bonds have gone, or will go, into necessary governmental activities or into the construction of necessary and beneficial public works;

chiefly highways to feed the railroads, or to supplement their inefficient service. Even foreign bonds are bought because their purchasers believe them to be, all things considered, a better investment than railroad securities. Of course, they may be mistaken in their judgment; but it is none the less true that the failure of the roads to sell their bonds at reasonable prices is due to no sentimental or prejudiced preference for other securities. The explanation is that railroad securities are not good investment; for the reason that the basis of actual capital is inadequate to support the necessary superstructure of credit. Capital is properly measured in terms of ability to render services—earning power. This is what the railroads lack; and it can not be supplied by any amount of rate-fixing. On the contrary, as we have already shown, the boosting of rates tends to weaken responsibility, lower efficiency and decrease earning power; that is, to undermine the basis of capital that supports their superstructure of credit.

So then we can have no industrial prosperity without the rehabilitation of the railroads; and the railroads can not be rehabilitated without a credit that they neither possess nor are able to acquire. Is there any remedy for this alarming situation?

We can not solve the transportation problem by ignoring its most important and serious elements. This is habitually done, both by railroad interests and their opponents. Those who oppose the present control and operation of the railroads are apt to minimize the magnitude of the work that has been done in building up our railroad system, the tremendous physical obstacles that have been encountered and surmounted, and the magnitude and difficulty of the physical and technical problems that remain. They are apt to demand lower rates and better service regardless of necessary and unavoidable cost, and without being able

themselves to point out at all definitely how cost can be reduced or service improved. On the other hand, those in control of the railroads seem to assume that their returns are to be assured, regardless of the value of their services or the ability of industry to pay transportation charges. This unreasonableness, on both sides, hinders and must finally defeat the solving of the transportation problem. It can not be solved until all interests recognize the basic facts of the situation, and coöperate in working out a solution in accordance with them. These facts have been given in the above analysis and may be summed up as follows;

1. Our geographical situation is such that our industries depend largely upon overland traffic—railroads and highways;

2. Overland transportation is high-cost transportation;

3. If our industries are to thrive, we must have transportation whatever the cost;

4. At best, the cost will be all that our industries can bear; therefore, it is imperative that we reduce the costs to the lowest possible minimum;

5. When actual costs have been ascertained, the people will have to pay them, if their industries are to go on, if their lives are to be sustained, if our nation is to endure;

6. Under the present system of railroad control and management, there is neither incentive to nor responsibility for efficiency. The economic incentive due to free competition has been necessarily removed; and no substitute has been provided. Under arbitrarily fixed rates, efficiency tends to decrease and costs to increase, so that we progress toward a minimum of efficiency and a maximum of costs instead of toward a maximum of efficiency and a minimum of cost. There is, therefore, not even a method of determining the lowest possible cost or the highest possible efficiency;

7. From this fact it follows that the basis of real capital to support the credit needed by the railroads to equip themselves for maximum efficiency is progressively impaired. The railroads can not possibly finance themselves, and are inevitably going head on to bankruptcy;

8. The financial development of the railroads has led inevitably to control by bankers; and control by bankers is fatal to efficiency;

9. Under the present system of control and management, railroad service, at all times costly, breaks down during every period of industrial expansion, thus rendering permanent industrial prosperity impossible; there is neither coordination of separate railroad systems nor coöperation within each system;

10. Many economists and experts hold that the transportation problem is wholly physical, that therefore its solution is a job for engineers. But engineers can not solve it, unless they are put upon the job of solving it, without any financial or political restriction upon their work. That is wholly unlikely under present railroad control. Furthermore, it ought to be obvious that physical problems can not be solved unless the railroads can be adequately financed. Nor can plans formulated by engineers for the solution of physical problems be applied and successfully worked out without an organization constructed strictly in accordance with economic principles.

The people have established their transportation system, and created corporations for its control and management, in order that the products of their industries may be transported, and in order that they may have such other services as are necessary to their security, prosperity and happiness. But the people can not themselves create or supply that service. The public requires, and must have, if our indus-

tries are to prosper and our "experiment in nation-making" is to succeed, the best possible service at the lowest possible cost. But service can be improved and costs lowered only by increasing the skill or diligence of workers, improving the quality of management, and providing a better policy of control and administration. The public, as such, can not supply these qualities, because it does not possess them.

These qualities are elements of production; production is accomplished only by the expenditure of human energy—the doing of work—and men work only to procure the things that will satisfy their wants. They also demand, as a matter or right, and as a condition of efficient service, the greatest possible measure of freedom in their employment. Therefore, the way to secure the greatest possible efficiency in the transportation service is to apportion control and management and rewards for services in accordance with the value of services performed by all who are engaged in the railroad industry.

We have shown that the three factors in production are labor, management and capital. Only labor and management can produce efficiency, and can be made responsible therefore. Capital is not an active factor in production, and therefore can not produce, and ought not to be held responsible for efficiency. But capital is necessary to the carrying on of industry. Capital consists of accumulated facilities for production; it is the product of labor; and therefore is entitled to a reward proportionate to its value in the service. But this value can not be arbitrarily fixed any more than the value of labor can be arbitrarily fixed. To procure either labor or material capital for the railroad industry, such inducements must be offered as will draw it into that industry in preference to others. Both as a matter of right and as a condition of economic efficiency,

as we have elsewhere shown, the owner of capital must be as free to dispose of his capital as the worker is to dispose of his labor.

Understanding, then, that we must have an organization based strictly upon these fundamental economic principles, and that the three factors necessary to the production of efficiency must be secured, and effectively coördinated, before we can hope to surmount the tremendous physical obstacles in the way of the complete solution of the transportation problem, we shall proceed to show how these things can be accomplished under the plan for the democratic reorganization of industry outlined in Chapter XI. We shall first explain how the transportation service will be financed under that plan.

Two things are necessary to bring capital into any industry; first, security for the investment; and, second, the assurance of a fair return upon the investment. Some investors prefer absolute security, with a comparatively low rate of return, while others in order to secure a higher return, will accept a less certain security. Or the same investor may want to place his funds partly in the one and partly in the other kind of investment. An industry, then, that can offer absolute security for capital will be able to obtain it at the minimum cost. The railroads are such an industry. There is no place in a sound economic system for the investment of capital for profit in a public utility because there can be no legitimate profit. A legitimate economic profit is the difference between efficiency and the lack of efficiency in competitive industry. There is no competition in the conduct of public services. They are carried on under grants from the public, in which the public specifies the services that shall be rendered, how they shall be rendered, and what shall be paid for them. The public, of necessity, supplies that part of the capital

that is represented in the grant—the right of eminent domain, the monopoly of a certain field of operation, the right to make certain charges, etc. No profit ought to be taken out of that capital. If the government sells its bonds to acquire the money capital needed, the public holds the entire capital interest, and the saving that is effected by securing money capital at low rates of interest, should go to the people in lower transportation costs.

The plan for the reorganization of the railroads which is advocated by the organized railway employees and is in agreement with the principles laid down in this book, provides that the federal government shall acquire full control of the railroads by paying the holders of railway stocks and bonds the actual value of their investment, as it shall be determined by the courts. The money with which to pay for these interests is to be secured by the sale of the bonds of the United States, having behind them the full faith and credit of the nation. These bonds would sell readily bearing a rate of interest at least two per cent. under the rates that now must be offered on the bonds of railroad corporations. If the fair value of existing private interests in the railroads is not over $10,000,000,000, as the railway employees claim; if there is needed $5,000,000,000 of new capital adequately to finance the roads, as railway financiers have represented; and if the saving in interest rates is two per cent. then the total savings resulting from government financing will amount to more than three quarters of a billion dollars a year.

What is still more important, under this plan we should be sure to get the capital needed, while under the present practice of progressively capitalizing the debts instead of the credit of the railroads, the time must come when no further capital could be obtained.

Thus the problem of financing the railroads is solved.

There remains the problem of securing efficiency in operation.

The plan of the railway employees solves this problem as effectively and justly as it solves the problem of finance. In brief it provides:

That Congress shall create a corporation of the United States government, not for profit, but exclusively for service. That this corporation shall have no capital stock and shall issue no bonds. That it shall represent the public interest, the management of the railways and the classified employee of the railways. That its sole capital shall be the skill, efficiency and ability of those employed in the transportation service. That it shall be governed in the following manner:

The administrative body is to be a board of directors; one-third of the members of which are to represent the public, one-third the management of the railroads, and one-third the classified employees. The government shall lease to this corporation all the lines and equipment and other railroad property of which it has acquired exclusive ownership by extinguishing private interests therein. The corporation shall operate the same and shall pay all operating expenses. It shall then pay to the government first such amounts each year as the Interstate Commerce Commission from time to time shall designate, for the proper maintenance and renewal of the existing plant, to pay interest on the bonds issued for the extinguishment of private interests and bonds issued to secure new capital for betterments and extensions, and to provide for the payment of the principal of all bonds as they become due.

Rates are to be fixed at a level estimated to cover all costs of operation, plus all capital charges, as above described. Then, if, through efficiency or economy, those charged with the management and operation of the rail-

roads should succeed in reducing costs of operation below the amount so fixed, one-half of the saving shall be distributed as a dividend to employees of both classes, based upon their several salaries or wages, and one-half shall belong to the public.

If in any year the saving that goes to the public shall equal or exceed five per cent. of the gross operating revenue, the Interstate Commerce Commission must reduce rates so as to absorb the public's share.

It will be noted that this is not a profit-sharing plan. It could not be, because profits have been eliminated. It is a savings-sharing plan. If the saving in any year amounts to ten per cent. or over, the public's share is distributed to those who pay transportation charges in the shape of lower rates. The consuming public will, therefore, be benefited in lower passenger rates and in lower prices for goods that they consume on account of the lower freight charges.

After such a reduction of rates has been made, the saving for the next year, unless there be a further economy in operation, or an increase in efficiency, will be only half as great as it was the previous year. But every reduction in rates produces an increased volume of traffic, thus tending to reduce the cost of operation per unit of traffic; that is, provided that the railroads are equipped to handle the increased traffic. The portion of savings assigned to the public will be used for the betterment of plant and equipment, and will thus tend to maintain the capacity of the roads to handle increased traffic and to reduce the cost of handling. The building of extensions, paid for in part by assessment upon the sections or interests benefited, will further increase earnings. The retirement of bonds out of sinking funds will have a like effect. So that every tendency is in the direction of lower rates, until finally service

will be rendered at the lowest possible cost, economically determined—or at absolute cost.

Thus, the public will get the best possible service at the lowest possible cost, and those who do the work of transportation will get the full reward for their services, apportioned according to their respective contributions to the efficiency of the service. So that the plan of the railway employees satisfies the requirements of economic efficiency, and conforms with the requirements of justice to the individual and to the community at large.

It is most important to note that this plan for the democratic reorganization of the railroads promises and practically assures the solution of transportation problems on the basis of progressively lower rates, while the present system can continue to function only on the practical certainty of constantly advancing rates. We have proved by the presentation and analysis of facts, and by citing reliable authorities, that the continuous advancement of rates will impair the services and therefore the credit of the railroads, and that it stifles industry in every period of increasing production. By converse reasoning, it may be inferred that the lowering of rates will contribute strongly to industrial prosperity, if it does not in itself restore it, thus increasing the earnings of the railroads and establishing their solvency and their credit.

It should not be difficult to choose between a transportation system operated solely for financial profit, which for that reason destroys industrial prosperity, ruins its own credit, and violates the inherent rights of the people, and a system operated for service, which for that reason will secure industrial prosperity, establish the credit of the railroads, and protect the rights of the people.

XIII

THE COAL INDUSTRY

In any highly industrialized country, coal is indispensable. It is necessary to the comfort, health and safety of the people in their homes, and it is necessary to the carrying on of the industries by which the people live.

The coal-mining industry is, therefore, a basic industry. It ought to be conducted as a public service, because coal is a general necessity, and the ownership of mines is a natural monopoly. But it is admitted that this industry is now in a state of hopeless disorganization and inefficiency. It is almost unbelievably wasteful, both of the natural resources that belong to the people, and of the human lives engaged in the mining of coal. At the same time, the service to the people is intolerably costly, uncertain and inefficient.

Next to the railroads, the coal industry furnishes the most striking example of the injustice, inefficiency and waste that result from the conduct of industry wholly in the interest of profit. Its history has been marked from the beginning by disregard of the rights, either of the public or of the men who do the work of production. Though an industry in which coöperation is indispensable if the interests of the people are to be efficiently served, there has been, from the beginning, no free or effective coöperation, between management and labor, between mining and transportation, or between producer and consumer. It has been a battleground upon which relentlessly antagonistic industrial forces have struggled for advantage, often regardless of the rights or the welfare of the people. Every method

known to modern industrial warfare has been repeatedly employed in the coal industry. In the past, the cruelty and oppression of employers has been often met by violence on the part of employees. This had been made an excuse for military intervention on the part of the States or the nation; and, under the cover of such authority, and under the protection of such power, additional cruelty and violence have been perpetrated that have been an outrage to humanity and a disgrace to our civilization. All this because we have not been able to agree upon a method for the use of our great coal resources in such a way as to conduce to the greatest benefit of all the people. All this because we have not learned to apply the principles of right and justice that are at the basis of American institutions to this necessary public service, this basic national industry.

But the day of violence, of cruelty and oppression, of waste and inefficiency in this basic industry is nearly ended. The public will no longer tolerate the injustice, inefficiency and waste that have marked its control and management; and the miners have discovered the futility of their former policy of "grievances and small demands" and constant and destructive fighting that wins at the best only temporary advantages. The miners demand the elimination of waste, inefficiency and injustice in the control and management of the coal industry; and they propose to accomplish this by unifying the industry under a control, a policy and a management that will recognize and protect the rights of all who invest their labor or their money in the industry, and that at the same time will protect and promote the rights and the welfare of the public. In short, the miners propose that the coal industry shall be reorganized in accordance with fundamental industrial principles of justice and efficiency—that it shall be organized and conducted on a basis of democracy.

The miners have assembled and published facts conclusively proving their contention that the present control of the coal industry is wasteful, both of material and human resources. We have not the space for even a review of the facts in this chapter, nor is it necessary. Most of these facts are gathered from the reports of government departments, and many of them are of common knowledge and admitted by all parties to the present dispute in the coal industry. It is generally admitted that the miners have proved their case against present control and management —that it is overcapitalized and over-expanded; that there is economic waste in production, transportation, distribution and consumption; and human waste in slack work, "carpushing," bad housing, disease, low wages and accidents; and that all this waste is traceable principally to the efforts of the operators to make profit on excess capital and overcapitalization. The miners have proved, by the presentation of facts and expert testimony, that these evils can not be removed without the unification of the industry; and they propose to secure unification by nationalization.

The miners are the greatest sufferers from the injustice and inefficiency that pervade the coal industry because they are both producers and consumers of coal. But they no longer consider their own interests alone. They recognize the rights of the public, and of other interests engaged in production.

The United Mine Workers of America approved the principle of nationalization at their annual convention held at Cleveland in 1919. This approval was reaffirmed in 1921. But the miners are aware that the mere general and vague approval of a principle will not solve the coal problem. They say that "the programme will remain a pious hope and a vague aspiration, until the rank and file know what the programme means; why it is needed, here

and now; and how to get it." The United Mine Workers organization has carried on a steady, persistent and effective campaign of education among its members, and has, from time to time, set forth its case before the public. It appears that their educational campaign has been successful, so far as the miners are concerned. They are undoubtedly overwhelmingly in favor of nationalization. The public, moreover, is looking with much greater favor upon the proposition, not wholly because it is convinced of its soundness and practicability, but because of the utter failure of those now in control of the coal industry to furnish or to propose a remedy for evils that threaten the economic life of the nation. It is one more example of the increasing bankruptcy of industrial autocracy, and of the increasing intelligence and constructive ability of those who are chiefly responsible for industrial production.

But the miners have not worked out a plan of organization for the carrying on of the industry under nationalization. This must be done, if their programme is not to "remain a pious hope and a vague aspiration." Doubtless the miners have been aware of this, and have expected that a plan would be in readiness by the time that the miners and the people had been converted to the principle of nationalization. But a practicable plan would be useful in the process of education, because it would show how the principle can be put into operation; how the hope and the aspiration can be realized. The miners' demands for unification of the coal industry are based upon well considered principles of justice and efficiency. They want nationalization. It would seem to be up to them to show that nationalization will work, how it will work, and that it will cure the ills that now afflict the industry.

Can the Coal-mining Industry be Nationalized? The miners trace the waste and inefficiency in the coal in-

dustry to the fact that it is operated for profit and not for service, and to the fact that it is over-expanded and over-capitalized, which they rightly ascribe to the motive of profit. They evidently expect that nationalization will eliminate overcapitalization, and that it will adjust the production of coal to the needs of the people. They expect by nationalization to eliminate both material and human waste, and to place the industry upon a basis of efficiency and justice, with regard to all the interests involved. It is necessary to consider whether this will work out in practice.

Constitutional Limitations. It is first necessary to inquire whether the federal government has the Constitutional power to own or operate the coal mines. If it has not, then nationalization, in so far as it means direct ownership or operation by the federal government, is impossible without an amendment to the Constitution. It will be admitted that the delay and uncertainty involved in submitting a Constitutional amendment deserve serious consideration in any plan for meeting crises. The federal government has no powers except such as are expressly granted in the Constitution of the United States, or such as may be derived by necessary implication from the expressed powers; and the power to own and operate coal mines situated within the borders of any State is not among those powers. If there is public ownership of coal mines, therefore, it must be State ownership, or municipal ownership, under a charter granted by the State. This would not be a unified ownership, and therefore would not serve the purposes of unified control, which is the first requirement of the miners' programme.

It may be held that the national government has the power to take over and operate the coal mines, as a means of protecting the rights and promoting the general welfare of the people. The power might be derived from some

other expressed power. If the federal government should own and operate the railroads, it might acquire and operate coal mines in order to supply them with motive power. But this would not necessarily imply that the federal government may do a general commercial business in the mining and selling of coal. Admitting these possibilities, the question of the Constitutional power of the federal government to own and operate coal mines is clouded with so much doubt that it would be a dangerous method to adopt for the solution of the present problem. Opponents of this or any other kind of industrial democracy are many and powerful. They may be counted upon to take advantage of every possible means to defeat such a programme. To adopt a method of doubtful Constitutionality would be to play directly into their hands.

But even if the national government could Constitutionally own coal mines and mine coal, it could no more do it successfully in violation of social or economic laws than can the coal corporations. It could not eliminate the fundamental interests of producer and consumer. It could not abrogate the laws of supply and demand. It could not do away with the fundamental functions in production—control, management and labor. It could not dispense with the investment of labor and capital; nor could it secure efficiency, if it destroyed the incentives to management and labor and to the investors of capital. These incentives are: a proportionate share in the control of the industry and an equitable share in its products. Under any policy, efficiency and justice will require that the industry be internally controlled and managed by those responsible for efficiency; that is, by those who do the actual work of production.

It is obvious that the national government could not itself directly run the coal mines. The department of commerce could not do it; nor could the department of labor.

The bureau of mines could not do it. The reason is, not that these departments of government are dominated by politicians; not that they are more inefficient for the work they were created to do than are many private business corporations (they may safely challenge comparison with corporate business—the coal business, say, on this basis); but they were not created, nor are they organized to mine and distribute coal. To reorganize any one of these departments so that it could efficiently conduct the coal industry would render it unfit to discharge its present functions, and a new department would have to be created to discharge them. If the national government, or the State governments, are to operate the coal industry with any hope of success, they must do it through an organization constructed for that specific purpose, on sound economic and industrial principles; and that means an organization in which the several factors and functions in production are rightly coördinated with each other. The State or the federal government can and must supply the general policy. It must enact such legislation and provide such administration as will enable producers to work together in free coöperation. Under such policy the direct management of the industry and the actual work of production will be in the hands of those who have given their lives to the service and who alone are qualified to manage and operate it.

Is there a way to unify the coal industry, on a democratic, just and efficient basis, without national ownership? It may be shown that there is. In fact, the coal industry may be in effect nationalized, without national ownership.

This is how it can be done:

Congress has the power to regulate interstate commerce. It may regulate interstate commerce for the protection of the rights and the promotion of the general welfare of the people of the United States. Coal is necessary to the com-

fort, health, safety and prosperity of the people. Coal exists in some States and not in others; but the people of the United States are spread throughout all the States. The people of the United States established the federal government, and conferred upon it certain powers. The government of the United States can not own coal mines, nor mine coal; but it can see to it that coal carried or sold in interstate commerce is so handled and distributed as to secure the rights and promote the welfare of the people. Those who mine coal are a part of the people of the United States, whose rights are to be protected, and whose welfare is to be promoted, as well as those who consume coal. Ninety-five per cent of all the coal mined in the country is transported out of the States in which it is mined. This means that nearly all the coal mined passes into interstate commerce, and thereby becomes subject to the power of the federal government. The national government is concerned to see that this coal is available in sufficient quantities; that it is economically handled; and that it is equitably distributed, so as to satisfy the needs of the people. To this end it may exercise any power granted, directly or by necessary implication, in the Constitution of the United States. In its regulation of interstate commerce the federal government may prescribe how coal shall be handled from the time it enters interstate commerce and so long as it remains an article of interstate commerce. It has the power to say that those who transport or sell coal in interstate commerce shall organize their business so as to give the people the best possible service at the lowest possible cost. It has the power to provide that sufficient capital shall come into the industry for the accomplishment of this end, and that return shall be paid upon no more than that amount of capital. It has the power to prescribe a living wage for those who do the work of moving coal; and

it has the power to prescribe that those who invest their labor or their capital shall have a share in the control and management of the industry, and a share in the results of their efficiency, proportionate to the value of their contributions to the industry. It has the power to provide a definite plan of organization for the accomplishment of these ends, and to prescribe that no company or corporation shall transport or sell coal in interstate commerce unless it adopts such plan of organization.

The coal industry is conducted almost wholly by corporations. These corporations are created by the several States; but they sell their coal mostly in other States, They can not transport it for sale in other States, except under such regulations as Congress may prescribe. Let Congress enact that these corporations shall be so organized and so conducted as to protect the equal rights of all who contribute to the industry under their control, and of all who are served by it. Compel them to deal fairly with the public, with labor and with capital. Require that, in order that they may transport and sell their coal in other States, they shall eliminate excess capital and capitalization, and shall base prices on the amount of capital prudently invested and beneficially used in the industry.

Those who want the coal industry nationalized should introduce into Congress a bill that should include the following provisions:

First. No corporation that is not organized under the provision of this act, or under State law making substantially the same requirements, shall ship or sell coal in interstate commerce.

Second. Corporations for the shipping or selling of coal in interstate commerce shall be organized on the following basis:

1. Capital Investment. There shall be issued to the

investor of money or property capital stock of a par value equivalent to the money invested, or to the value in money of the property invested. The capital stock shall have exclusive title to all of the property of the corporation, as security for the investment. The stock shall be assignable, and transferable, and shall be voted by its owner in person and not by proxy, on the basis of one vote for each share of stock. The stock shall bear a limited, preferred and cumulative rate of dividend.

2. Bond Investment. Bonds may be issued, bearing a rate of interest lower than the rate of the preferred dividend on capital stock, and having a lien on all the property of the corporation ahead of the capital stock.

3. Labor Investment. There shall be issued to every employee of such corporation labor stock, having no par value and no share in the properties of the company. Such stock shall be non-assignable and non-transferable, and shall be valid only during the course of its holder's employment. Such stock shall confer upon its holder a vote in the administration of the affairs of the corporation proportionate to the value of his labor investment. The vote of labor stock shall be upon the following basis: Every employee of the corporation receiving wages or salary shall have the same number of votes as an investor of money or property whose investment earns an amount equal to such wages or salary. That is, if any investor of labor is paid one thousand dollars a year, his vote shall be equal to the vote of an investor of money or property whose preferred dividend is one thousand dollars a year. Wages, the preferred dividend of labor, shall be a first lien upon all gross revenue of the corporation, after paying other costs, including interest on bonds.

4. Distribution of Earnings. If the gross receipts of the corporation shall in any year exceed its total expendi-

tures, including interest, wages and preferred dividends, the excess shall be declared surplus, and shall be distributed in the following manner:

One half of such surplus shall be designated as corporate surplus and the other half as public surplus. The corporate surplus shall be the property of the corporation; the public surplus shall be expended only for the public benefit, as hereinafter provided. The corporate surplus, being the property of the corporation, may be expended in any way that the majority of the investors of both money and labor shall determine; but if it is distributed as a dividend, the distribution shall be on the basis provided for the voting of capital and labor stock; that is, the shareholder who receives one thousand dollars a year as salary or wages shall receive the same dividend as the shareholder whose preferred dividend is one thousand dollars.

The public surplus may be expended in either of two ways: First, it may be used for the betterment or the increase of plant and facilities; or, second, for the retirement of capital.

Valuation of Property Investment. Properties of existing coal companies may be invested in the corporation herein provided for, on a valuation to be determined by the commission designated in the next section. The valuation of such properties shall be made wholly upon the basis of their use for the purposes of the industry.

Administration and supervision. Such corporation shall conduct its business in accordance with the following requirements:

It shall keep all of its accounts in the manner prescribed by a commission of three members, to be appointed by the President of the United States on the recommendation of the Department of Commerce, which shall operate as a part of that department. Such commission shall have power:

To value property offered for investment in such corporation;

To prescribe annually the amount that shall be set aside from gross earnings to cover depreciation;

To determine, on the recommendation of the board of directors, the disposal of public surplus, in accordance with the provisions of this act;

To require that a deficit incurred in any year shall be made up out of the public surplus of the succeeding year or years;

To prescribe methods of accounting for the corporation, and to examine and audit books, accounts and records;

To require such periodical or annual reports as may be necessary for the supervision of the business of the corporation in the public interest.

Wages. Wages shall be determined by the management of the corporation in the same manner that the rates of preferred dividends are determined: that is, the management shall get the highest possible service at the lowest possible cost.

The Plan Analyzed. We shall now proceed to analyze the plan above outlined, with regard to:

First, The removal of present evils in the coal industry;

Second, The interests of labor;

Third, The interests of the capital;

Fourth, The interests of the public.

1. Will the plan remove present evils form the coal industry? It has been shown that all the greater evils that afflict the coal industry flow from the general fact that it is conducted for profit and not for service, and to the special condition of over-expansion and excessive capitalization. How will the plan remove these evils? It will do so by reorganizing the industry on the basis of the actual capital needed, whether in the form of money or property or of or-

ganizing ability, skill or labor energy. The valuation of property invested will be determined by the commission provided for, thus directly protecting the interests of the public. Besides, neither the investors of labor nor the investors of other capital, both of which have a share in control and management proportionate to the value of their respective contributions, will tolerate an excessive valuation of such property. The investors of capital will oppose the employment of more men than are needed, as will also the workers themselves, since that would tend to keep down the surplus and prevent them from receiving dividends. Intermittency of employment would be eliminated, because both managers and miners would be interested in having steady employment; and they would have a majority in the determination of the policy of the industry. Needless risk would also be eliminated, for the same reason. Car-pushing and all similar slavish and uneconomical practices would be abolished, because managers, experts and workers would coöperate to that end. Waste of coal resources would be greatly lessened, by eliminating the profit motive, by the improved morale of managers, experts and miners, through free coöperation; and could be absolutely forbidden by State or federal authority. Abuses in distribution would largely disappear with the elimination of intermittent production.

2. The Interests of Labor. The interest of labor would be served by the same thing that serves the public interest and the interest of capital; that is, by efficiency in production. It might seem at first glance that the policy proposed treats labor as a commodity, since the management of the corporation is to employ the best workmen it can obtain, at the lowest possible cost. But under this plan labor is not a commodity; it is an investment. Labor investment is placed on a basis of complete equality with cap-

ital investment, each having a share in control and management and in the product of the industry proportionate to the value of its contribution. With its equal share in control and management, labor is its own employer. The investment of labor is voluntary, as is the investment of capital. Wages—the preferred dividend of labor—are determined on the same principle as the preferred dividend of capital. Whether either shall have anything more depends upon the efficiency of management and the efficiency of labor, for which the investor of capital and the investor of labor are jointly responsible. The management will know what it can afford to offer for the different kinds of skilled and unskilled labor; the workers will know what they can afford to accept, as a minimum return on the investment of their labor. Presumably, the miners will be organized, as at present. They can have their own research service; their own technical investigators; and their own wage boards. They can, if they choose, determine for themselves the terms upon which they shall offer their service. In short, the plan permits of collective bargaining that will be constructive and not destructive; that is, a factor in coöperative adjustment, instead of an element in industrial warfare.

Though the investors of money or property have a share in the control and management of the industry, they will always be in a minority as against labor, including management. The labor investment is always greater than the capital investment. The adjustment of wages, therefore, will be largely a matter to be determined among the different classes of employees. How much shall be paid for pick mining; what shall be the rate for machine work; what shall be the wage for car-men—these will be the particular questions that must be decided. They will not be decided on the outside, in the local and central councils of the labor

organizations, as now; but on the inside they will be decided by a management in which the investors of labor have the determining voice. The workers in each corporate unit of the industry will determine the wage policy for that unit. A policy for the entire industry may be worked out through conferences among the different managements; and their representatives may meet with the representatives of the miners' organizations in order to come to a final agreement.

The important question for labor will no longer be: How much of the entire product of industry shall go to labor and how much to capital? What is the relative value of the different kinds of labor, and what wages shall each receive? It will be of comparatively little importance what is the average level of wages. What the workers do not get in wages they will get in their dividends on surplus. But, as the wage received by each is the basis upon which dividends are computed, it is important to every worker whether his wage is rightly adjusted, with relation to the wages of all others. The public has no direct interest in this matter, its rights being protected by the division of surplus and the governmental surpervision provided. Investors of money or property are not directly interested in the relative wages paid to labor, except that they should be so adjusted as to produce the highest efficiency. The first concern of both the investor of money or property and the investor of labor will be that wages be so adjusted as to conduce to the highest efficiency. That will mean that both interests will favor, in the first place, a living wage—since otherwise physical or mental energy can not be maintained—and, second, an adjustment of wages in the different employments and to every individual in each employment, on the basis of the value of services rendered. This is exactly what every self-respecting worker wants. It is what organized labor demands; it is what the organized miners demand. So

then all parties concerned will be in agreement in regard to the basis of wages. The practical adjustment will be a matter of internal bargaining on the part of the workers themselves, aided by such expert and technical services as they may find advisable.

Finally, it is to be borne in mind that for all industry, producers have an interest as consumers that is equal to their interest as producers. We must not lose sight of the final purpose of industry—which is to satisfy the economic wants of the people. That means the wants of all of us. The individual worker must develop his own efficiency so as to get a job. He will then be interested in further developing his own efficiency, and in contributing to the combined efficiency in the industry in which he is employed, in order that there may be a surplus to be divided. As producer he will get his share of corporate surplus—the half that belongs to producers—in the shape of a dividend on his investment of labor. As consumer, he will get his share of public surplus in the shape of reduced prices for the things he has to buy. Every worker is serving his own interests when he is serving the interests of the public. He is promoting his own welfare when he is contributing to the service that the industry in which he is engaged renders to the public. Every investor of money or capital contributes to the welfare of every worker, both as producer and as consumer; and the same is true of every one who contributes to the efficiency of management. Every dollar of needed capital adds to the output of labor, and every increase in output means an addition to the returns of labor, as wages, as dividend, or in the shape of lower living cost. Every improvement in policy, in administration, in organization or in management likewise adds to the return of labor. So that the larger interest of the worker is his interest as an investor. It is an interest in productive efficiency. His

interest in wages is only a part of this larger interest.

Security of Labor Investment. The plan provides that wages—the preferred dividend of labor—shall be a first lien upon all gross revenues, after paying general costs, taxes and interest on bonds issued. This is practically as at present, with regard to security for wages agreed upon; but not with regard to the basis for fixing wages. Employing interest and investors have insisted that returns on the investment of capital, and even upon the profit-capitalization of the industry shall be assured, before wages are provided for. The plan provides for the payment of interest on a pure investment of capital, carrying none of the risk or responsibility of the industry, and sharing in none of its earnings, ahead of the payment of wages. But it properly provides that wages shall be paid before preferred dividends on capital investment that carries with it a share in control and management, that assumes a part of the risk and responsibility, and that participates in surplus earnings.

Whether or not there will be any surplus depends primarily upon the efficiency of labor and management. Money or property invested is not an active factor in the production of efficiency. The investor of money or capital has an interest in efficiency, in order that he may get a return on his investment; and he may contribute to that efficiency by taking part in the determination of the policy of the corporation. He may even assist in having himself appointed as an official or employee of the corporation, in which case he would directly contribute to efficiency, and would be responsible for his own contribution. But, in that case, he would be an investor of labor as well as an investor of money or property, and would have an additional interest in producing efficiency. He would want a part in the control and management of the industry proportionate to his labor investment, as well as proportionate to his

money investment, and he would insist that his salary or wages be paid before dividends were declared on either labor or money investment. Thus, labor comes before money investment, both in ability to produce efficiency and in responsibility for efficiency; and it is to the interest of the investor of money or property that wages sufficient to assure efficiency be paid before dividends are declared.

3. The Interests of Capital.

(a) Security of Investment. The security for bond investment is a lien upon all the property of the corporation, prior to the claim of the investor in capital stock. Interest on such investment is to be paid out of gross earnings, before the payment of preferred dividends.

The security, however, rests upon the property of the corporation and not upon its earnings. Interest will be paid out of gross earnings, so long as there are any available for that purpose, as ultimately will be the principal. If earnings fail, the holder of bonds may levy upon the property of the corporation, as may the holder of a claim for wages upon gross revenues. The bond investment is secure as long as the property of the corporation is intact, and sufficient in value to pay the amount of the bonds issued. As the amount of bond issues will always be far less than the total value of the property, the security for such investment is practically absolute.

Stock investment is secured by title to all the property of the corporation, subject only to the lien in favor of the holders of bonds. As both bond and stock investment must represent equivalent values in money or property, the security for stock investment will equal the principal invested from the beginning, and will constantly tend to exceed the actual investment in amount and value as additions are made to plant, or as capital stock is retired out of surplus earnings. Preferred dividends on

capital stock are a first lien upon net earnings, after cost, including interest and wages, have been paid. Thus, the repayment of the principal of stock investment is secured by the property of the corporation, and is safe whether the industry makes good or not; but dividends will depend upon the soundness of the policy, the effectiveness of organization, the wisdom of management and the efficiency of labor in the industry; and the investor in capital stock has his share in the determination of policy and management, and is proportionately responsible for the efficiency of the entire industry. The investor in capital stock assumes this responsibility, with its attendant risks, when he chooses a stock investment in preference to a bond investment. He chooses the prospect of a larger return, rather than the certainty of a smaller return on his capital.

But the investor in capital stock contributes more to the industry than money or property. He contributes his own ability as co-administrator of the industry. He contributes to the determination of its policy and to the shaping of its management. He comes into the industry equipped with a certain amount of material wealth that is of value to it. This value is accurately measured by the interest that would be paid, if the investment were in bonds instead of in capital stock. The additional value is the personal contribution of the investor, consisting of the share of the risks of the industry assumed by him, and his contribution to the administration of the industry. The risk is greater than the risk of the investor of labor, since the preferred dividend of labor comes out of gross earnings, while the preferred dividend of capital stock comes out of net earnings after wages have been paid. But the contribution to efficiency made by the investor of capital stock is less than that of the investor of labor. The former is not directly employed in the industry. Though he has a part in its control propor-

tionate to his investment, he will spend very little of his time in connection with its affairs, unless he becomes an officer or employee of the corporation. But, in that case, as already explained, he becomes an investor of labor, assumes an additional responsibility, and acquires an additional interest. It is, therefore, right that the payment of preferred dividends on money or property invested should come after the payment of wages.

(b) The Valuation of Capital Investment. The valuation of capital investment will be the market value of the money or property at the time the investment is made. This is determined by the law of supply and demand. The corporation will issue its bonds and stock at the lowest rate at which it can sell them, and will sell at the highest price it can obtain. The owner of money or property will choose the offered investment, if in his judgment it is preferable to any other investment then available. The corporation will not pay higher than the market rate for capital, any more than it will pay more than the market rate for labor, because all interest involved—including the capital interest already concerned—will unite to keep costs down to the lowest possible level, in order that surplus may be accumulated out of which to pay dividends. The result will be that the value of capital will be determined by mutual agreement between free and equal interests, as in the case of wages. It will be determined in accordance with economic law, and therefore will be both just and accurate.

But what about the capital now employed in the coal industry? Ordinarily, capital consists in organization and established good-will, as well as in tangible property. The organization of the coal industry is confessedly bankrupt. If it ever had any good-will, it is rapidly destroying it through its incapacity to take care of its own interests, and through its utter disregard for the interests both of labor

and of the public. One of the most important elements upon which the value of organization is based is its ability to obtain skilled and unskilled labor where and when required. This ability the operators have destroyed by their unfair and oppressive treatment of labor. The control and management of the coal industry must be repugnant to all honest business. Even other exploiting interests show a readiness to sacrifice it to the rising popular discontent. The coal industry is bankrupt, in constructive policy, in management and in square dealing, either with labor or with the public. It is mentally and morally bankrupt.

But even with good-will excluded the coal industry is overcapitalized. It has, as appears from the testimony of most reliable experts, from 20 to 40 per cent. more actual plant capacity than is needed to supply all the coal that the country needs. This excessive plant capacity is enormously overcapitalized, as a basis for "earning" profit. Obviously, this overcapitalization must be eliminated in any efficient and just reorganization of the industry. What is the value of the actual plant? It has no market value outside of the coal industry. It must therefore be valued on the basis of its use in producing coal. Coal in excess of the needs of the people has no value. So that, however much coal might be produced by existing plants running at full capacity, their value must be measured by their use in producing the coal actually needed and that can presently be sold. This, of course, with reasonable allowance for reserve capacity.

Therefore, in valuing existing coal properties for investment in the reorganized industry, we must eliminate policy, organization, good-will, and overcapitalization; and must value plant and facilities on the basis of its actual usefulness in producing the amount of coal that the people need;

or accept, as capital investment, only such part of plant and facilities as may be needed for that purpose.

What is to be done with surplus plant equipment? That is a matter for the consideration of its owners. The industry is inflated. It will be deflated under any plan of reorganization that will secure and protect the rights of the people. There are more miners employed than are needed in the industry, if it were efficiently controlled and managed. The miners are fully aware of this fact. They know that unless the demand for coal is increased on account of lower prices due to the reorganization of the industry, some of them may be hunting jobs when the industry is reorganized, even though it be reorganized on the plan they propose. They are ready to face an unavoidable situation. Why should capital, imprudently and excessively invested, receive more consideration than labor? "But the miners can get other jobs, while the property invested in coal mining would be useless in any other industry." If the miners still have the ability to earn their living in other employments, it is due to no superior wisdom or humane consideration on the part of their employers. They will be taking nothing with them for which they are indebted to the operators of the coal industry. On the other hand, the miners are in no way responsible for the over-equipment of the industry; nor is the public. That was done in the interest of speculative profit. The profit interest is therefore wholly responsible, and should bear the entire loss resulting from its mistaken policy.

(c) The Retirement of Capital. The plan provides that the half of surplus that goes to the public shall be used only for betterment or for the retirement of capital. To the extent that it is used for betterment it will obviate the necessity for additional outside capital, and will conduce to the further accumulation of surplus. As surplus accumu-

lates, there will be more to be used for betterment or for the retirement of capital. So that in time there would be enough accumulated, over what is expended in betterment, to retire all capital. The industry would then capitalize itself; it would be self-financing. The only use there would then be for public surplus would be to maintain the efficiency of the plant. What would be done if there should be an excess of surplus, after all plant requirements had been taken care of? This question will be answered in the next paragraph, which analyzes the public interest in the coal industry.

4. The Interest of the Public. The function of all industry is to produce the things that will satisfy human wants. The function of the coal industry is to produce coal. We are all consumers of coal, and therefore we are all interested in its production. We buy coal with our earnings out of one or another industry; therefore we contribute to the coal industry a sum equal to the combined contributions of those who produce coal. The total paid by consumers for coal must cover the total cost of its production, because there is no other source from which anything can be drawn to cover costs. All that goes to labor or capital, in interest, wages or dividends, is therefore contributed by the consumers of coal.

This contribution measures the public interest in the industry. It is the paramount interest, because it is an interest shared by all the people. But though the public contributes all that goes to the payment of wages, interest and profit in the production of coal, it is not primarily interested in high wages, high interest rates or large profits. On the contrary, representing consumers of products or services, the public is interested to have those products or services at the lowest possible cost. The public is therefore interested in anything that will improve the quality or increase

the quantity of goods or services, or that will decrease their cost. The public wants the best coal it can get at the lowest possible price. But improved quality or increased quantity comes only through improved control and management or through increased skill or greater effort on the part of producers. Consumers of coal, as such, can not produce the efficiency necessary to give them more and better coal at lower prices. All they can do is to adopt such a policy as will enable and induce the producers of coal to increase their efficiency. Production is the result of human energy—work—applied to natural resources; and men work only to supply their needs. To secure efficiency in the coal industry, then, the public must adopt such a policy as will give those who are able and willing to produce coal access to the coal deposits, to enable them to employ their capital and labor in free and equal coöperation, to furnish them with transportation, and to keep open the markets for coal. It must also provide that every man engaged in producing coal—investing his capital or labor in the industry—shall have a share of the earnings of the industry proportionate to the value of his investment. The public then contributes to the industry the general policy under which it operates; provides for an organization in which capital and labor are rightly coördinated in production; protects the rights and interests of each; supplies markets and transportation; and pays the cost of production.

In return for these contributions to the industry, the public is entitled to have coal according to its needs, at the lowest possible price. How will the plan secure this right to the public?

1. The plan eliminates all excess capital and capitalization, thus doing away with unearned profits heretofore paid by the consumer;

2. The plan provides a means of securing the capital actually needed in the industry at the lowest market rate, guards against the over-accumulation of actual capital, and absolutely eliminates fictitious capital, thus limiting capital charges to the actual capital that can be beneficially used;

3. The plan provides that one half of all surplus earnings shall be set aside for the betterment of plant or the retirement of capital, thus opening the way for the self-financing of the industry, when the capital charge will be entirely eliminated;

4. The plan, by making the profits of both capital and labor contingent upon the efficiency they develop, assures that there will be a public surplus from which to finance improvements and to retire capital;

5. The plan provides that after capital is retired, all public surplus that is not required for betterment or increase of plant shall be absorbed in price reductions;

6. By providing a right distribution of earnings, the highest efficiency of management, of technical ability and of labor will be secured. As a result, the industry will always be able to produce more coal than can be sold. It will therefore be to the interest of both capital and labor investors that prices be reduced to as low a level as possible so as to expand the market. The producers will prefer narrow margins on a large volume of sales to wide margins on a small volume of sales, especially as the larger production will stimulate production in all other industries, thus lowering the cost of living to those engaged in the coal industry.

Thus it is seen that the solution of the coal problem lies in the reorganization of the industry on a democratic basis. There is no other way. Control by the miners would be class control. It would be neither just nor effi-

cient. It is syndicalism, and as such has been condemned and rejected by the miners themselves. Control by a "super-syndicate" has been suggested. That would also be syndicalism, with all the evils of industrial autocracy added. As the miners put it, such a control would mean that we should "let some strong man from Wall Street do to coal what Gary and Schwab have done to steel, what Rockefeller did to oil." This plan is also rejected by the miners, and could not be accepted by the public.

The miners declare that they "must have their part in a national policy for the coal industry." They will have it under democratic organization. Capital will have its part. The public will have its part. The interest of the consumer and the interest of the producer will be equally protected and promoted. The equal rights of all will be secured; and thereby the highest efficiency in the industry will be achieved. The coal industry will then discharge its true function of supplying the needs of the people.

XIV

THE PROBLEM OF MARKETS

GOODS are produced for the satisfaction of human wants. In order for them to serve this purpose, it is obvious that they must reach the consumer. They must be delivered, as, when and where the consumer requires them. It is the function of transportation to carry the products of industry. It is the function of marketing to buy them from producers; to preserve, condition and store them; and to sell them to consumers, in such form and quantity as will satisfy their needs.

Few commodities are consumed in the form in which they are at first produced from the natural state. Nearly everything needed for the satisfaction of wants undergoes numerous processes of manufacture between the "primary producer" and the "ultimate consumer." The result is that producing activities, transporting activities, manufacturing activities and marketing activities are usually so intricately mixed with each other that it is often difficult to distinguish the several economic functions. Nevertheless, though several or all of these functions may be discharged by the same industrial and business organization, they are separate economic functions, and require separate analysis.

In so far as it is separable from other economic activities, the function of marketing is discharged by middlemen; by individuals, associations or corporations that buy from the producer and sell to the consumer. But it is a mistake to suppose that all buying and selling is done by mid-

dlemen. That is impossible, because in one way or another, the producer must sell to the middleman and the consumer must buy from him. In either case, one half of the transaction is carried, and one half of the economic function discharged by the producer or the consumer. It is the business of the middleman to facilitate these transactions—to reduce the cost of conveying goods from producer to consumer below what it would be without his services.

Marketing is an economic service, similar and closely related to transportation; so closely, in fact, that the two activities are often inseparably intermingled. Transportation and marketing facilities are often inseparable. The carrier sometimes necessarily buys and sells products, and the middleman sometimes just as necessarily and unavoidably transports them. Like transportation, marketing is an economic service that may, and usually does, affect numerous producers and numerous consumers. And like transportation the ability of millions of producers to dispose of their products, or of millions of consumers to obtain the things that will satisfy their wants, may and often does depend upon a highly organized and centralized system, which may or may not be operated in the interest of producers and consumers. In short, it is possible for those controlling marketing facilities to dominate and exploit both the interests of producers and the interests of consumers.

Wherever the marketing of a given product or class of products depends upon a service controlled by a private monopoly that is in a position to determine what the producer shall receive and what the consumer shall pay, that service is in the nature of a public utility, and should be organized, controlled and operated for public service and not for private profit, under the plan outlined for the railroads. But not all marketing is so controlled and

monopolized. There remains a considerable degree of competition in many marketing activities. There are many marketing enterprises that are conducted by individuals, and others that are owned, controlled and operated by producers' or consumers' coöperative associations. The condition of our marketing service is not in all respects like that of our railroads, which are necessarily public utilities, which must be operated as a unit, and which long since fell under the control of financial interests that can not and will not be responsible for their efficient operation. There is still much to be hoped for from individual initiative and free and voluntary coöperation in the field of marketing. Much has already been accomplished by coöperation, and much more can be accomplished, if a form of organization can be devised that will be fair to all interests, and that will apply the incentives to efficiency where the ability to produce efficiency exists.

We have shown that all industry is in some degree coöperative, that different industrial enterprises are interdependent wherever there is division of labor and exchange of services or products. There is coöperation wherever a number of producers work together in the same organization, whether their activities be self-controlled and self-directed or whether they are subordinate to the will of a master or an employer. There is coöperation, though control and management be in the hands of a single economic interest, and though the majority of the coöperating producers have little or nothing to say about the distribution of products. Every corporate industry is coöperative. The corporation is, in fact, a form of coöperation; and for purposes of efficiency probably the best that has ever been devised. But coöperation as carried on under modern industrial corporations is not democratic coöperation, because it does not provide for the equal rights

of individuals. It is not economic coöperation, because it does not apportion control and management nor distribute products in accordance with the value of services rendered. It does not place incentive where ability to produce efficiency and responsibility for efficiency reside.

Even producers' and consumers' coöperatives are somewhat faulty in these respects. A farmers' coöperative elevator, creamery or packing plant is organized to handle, manufacture and sell the products of its members. A consumers' coöperative store is organized to buy and deliver goods required by its members at the lowest possible cost. In the first case, each farmer contributes his product, and in the second, each consumer contributes his demand. The producer interest is the only interest directly considered in the first, and the consumer interest is the only one directly considered in the second. In both cases, there are other industrial interests directly involved. The coöperative association may or may not furnish its own capital. Its members, or some of them, may or may not contribute their services. But if either capital or services are contributed, it is usually upon the same basis as that upon which contributions are made to corporate industry. Those contributing capital control the industry, voting either equally or on a share basis. Those who contribute services—labor or management—and who alone can produce efficiency, and ought to be made responsible for efficiency, receive wages or salaries, but have, on account of their employment, no part in the determination of the policy of the organization. There is an approach to equity in control where all coöperators have equal votes, regardless of the capital they contribute. There is likewise an approach to equity in distribution of profits where the patronage dividend is adopted. But there is exact economic equity in neither case, and the interests of manage-

ment and labor in the conduct of the enterprise are left out entirely. This is the most serious defect, both from the point of view of efficiency and the point of view of justice. The men who produce efficiency in modern coöperative enterprises are usually merely employees, whose chief incentive to efficiency is the holding of their jobs. Those who control the policy and are held responsible for the management of these enterprises have not necessarily either the training or the ability to produce efficiency; and if they had they could not use it, for the simple reason that they are not on the job.

This is industrial coöperation, but it is not economic or democratic coöperation. To be economic coöperation, it must provide for the sharing of control and management, and the distribution of rewards, in accordance with the value of the several contributions of the coöperators. This can be done in producers' or consumers' coöperatives, as effectively as in any basic or other industry organized and conducted in the corporate form. It can be accomplished by organizing in the following manner:

Producers' Coöperatives. A coöperative association for the selling of farm or other products should be organized as a corporation. The corporation should be composed of the individuals whose products are to be marketed, the persons who invest money or property in the enterprise and those who do the work of carrying on the enterprise. It should be financed by issuing bonds or stock, as explained in chapter XI; the holder of bonds having a first lien upon all the property of the corporation for the security of his investment, but no part in its control or management. The holder of preferred stock, representing money investment other than bonds, should have a lien second to the lien of the bond holder, and a share in control proportionate to the amount of his contri-

bution. The preferred stock should bear a limited, preferred and cumulative rate of dividend, as in the case of all other corporations. Then, as in the plan for all corporations other than public utilities, there should be issued labor stock, non-transferable, and valid only during the course of the employment of its holder, which should entitle him to a vote in the election of the board of directors or of other officers, and in the determination of the policy of the corporation, on the basis that the person receiving a thousand dollars a year as wages or salary should have an equal vote with the contributor of money capital whose investment earns him a thousand dollars a year. But there would be this difference: the producer contributing products to be marketed would be regarded as a contributor of labor, and would receive labor stock, equal to the amount received for his products, giving him the same standing in the organization as the wage-earner or the salaried worker in the employ of the corporation.

To illustrate how this would work out, let us suppose the organization of a coöperative elevator association, for the marketing of grain grown by a group of farmers. If ten individuals of this group each contributed for the financing of the organization $20,000, each of them would receive, say, 20 shares of preferred stock, par value $1,000. If each of these ten individuals brought in a thousand dollars' worth of grain to the elevator, each would receive, in addition to his preferred capital stock, a share of labor stock. If ten others invested no money or property, but each brought in one thousand dollars' worth of grain, each of these members would receive a share of labor stock. Then, if, say, five other farmers became employees of the elevator company, each of them being paid a thousand dollars a year, or at the rate of a thousand dollars a year, each member of this group would receive a share of labor

stock, entitling him to a proportionate share in control and management. And if the elevator handled for each of these members one thousand dollar's worth of grain, he would receive an additional share of labor stock. Or if persons other than the farmers having grain to be marketed contributed capital or services, they would likewise receive capital or labor stock, equal to their several contributions, and entitling them to like shares in control and management.

The distinctive feature of this plan for consumers' co-operatives is that it gives equal consideration to the interests directly to be served by the enterprise—those having products to be marketed—and the interests that contribute material or labor capital to the carrying on of the enterprise. The enterprise would, of course, be useless, if no one brought in products to be handled and sold. It could not be carried on without capital, management and labor.

There are, therefore, on the producers' side, three interests to be protected: the producer of the product to be marketed, the capital interest and the labor interest. But a thousand dollar's worth of grain or other products brought in to be marketed represents a thousand dollars' worth of labor on the part of the contributor. It may, of course, represent in part the value of capital invested in a farm or other productive enterprise; but that in turn represents labor. So also does capital contributed to the marketing enterprise represent labor; but such capital is used, but not consumed, to market the product. We may regard the entire purpose of the organization to be to get over to the consumer certain products; or, from the producer's point of view, the effecting of an exchange of goods which he produces for goods produced by others. One individual produces a thousand dollars' worth of wheat; another puts in capital worth a thousand dollars a year, and

a third does a thousand dollars' worth of work in the management or operation of the marketing enterprise. The total result is the delivery to consumers of three thousand dollars' worth of wheat. The services of these three are equal and they should have equal parts in the control and management of the enterprise.

In regard to the distribution of the proceeds of the co-operative enterprise, the member who contributes a thousand dollars' worth of products to be marketed gets his thousand dollars in the price paid him therefor. The contributor of a thousand dollars' worth of labor gets an equal amount in wages or salary; and the contributor of a thousand dollars' worth of capital retains his capital and receives the annual value of its use. Each retains or receives back the equivalent of all he put in, and no more than he put in. If surplus is earned, it is to be divided in accordance with the plan proposed for all corporate industry—one half to be public surplus, to be used for the betterment, renewal or extension of plant and facilities or for the retirement of capital; and the other half to be private surplus, to be disposed of as the shareholders shall determine; provided that if any part of such surplus is distributed as a dividend, it shall be shared by investors of labor and investors of capital on the basis that each contributor of labor whose salary or wage is at the rate of one thousand dollars a year shall share on the same basis as a contributor of capital whose investment earns him a thousand dollars a year.

Labor, whether represented in products brought in by members or in services applied directly in the enterprise, would have a first lien upon all gross revenues. The contributor of money capital will have a first lien for the payment of his preferred dividend, on all net revenues after all running expenses, including wages and interest on

bonded indebtedness have been paid. Wages constitute the preferred dividend of the employees of the corporation; and the price received for his products represents the preferred dividend of the producer. These balance the preferred dividend paid to the investor of capital. Money capital invested represents past labor—wages, or other economic return actually received out of former production. Therefore, the present contributor of labor is entitled to have his wages paid out of earnings before dividends upon capital are paid. Thus, all interests on the producing side receive equitable treatment, both with regard to control and management and with regard to the division of the product.

The earnings of the producer represent his buying power—his ability to satisfy his wants. Therefore, if earnings are rightly distributed, buying power will be rightly distributed. This will hold for a particular industrial enterprise; but it might happen that one industry will acquire advantages over other industries, that will enable it to charge disproportionate prices for its products. The equitable distribution of earnings in the particular industry does not protect those engaged in other industries who are consumers of its products. How, then, is the general consuming interest protected? It is protected by the assigning of one half of the surplus, after paying costs, wages and preferred dividends, as public surplus. This public surplus can be used only to provide betterment and renewal of plant and equipment or for the retirement of capital. So used, it will increase efficiency and reduce costs of production, thus enabling the industry to lower prices to consumers of its products. Lower prices will bring larger sales, resulting in lower cost per unit of product, so that there will be a greater surplus, both for better financing the industry and for dividends to investors of material or labor

capital. This process will be repeated until industry is "saturated with the service," and consumers will be getting products at absolute cost.

Consumers' Coöperatives. Coöperative industry is organized chiefly to facilitate the division and specialization of labor and the exchange of goods or services. Economically speaking, we are all producers and all consumers. We all consume what all of us produce; but each does not consume just the same things he himself produces. We coordinate and unite our efforts to produce certain commodities or to deliver certain service, while certain other goods or services are produced by others, and we aim to adjust our industrial system so as to distribute all products according to the needs of all. The function of industry is to deliver goods or services, as when and where required for the satisfaction of wants. The extent to which the wants of all are satisfied measures the success of our industrial system.

But, as we have seen, the economic community, as consumers, can not produce efficiency. The energy expended in production is individual, and it will be economically and efficiently applied only if certain fundamental principles are adhered to in the organization of production. There must be such an apportionment of power and responsibility, and such a division of the products of industry, as will give the necessary freedom for the development of ability, and as will provide the necessary incentive to induce individuals to exert their best efforts in production. So that, though the function of industry is to serve consumers, it must be organized for production, and must be directly controlled by persons each of whom will have a special interest in his particular part of the work of production. But the wants of all of us set the limits of production, both in quality and in quantity. It follows that the satisfaction of the wants

of any group of persons, or certain wants of all of us, might be taken as the purpose of the organization of a particular industrial enterprise. It is as easy, and often as necessary, to organize to buy wheat as to sell it. It is sometimes necessary or advisable to buy and sell through the same organization. It may even be beneficial, under certain conditions, for a single organization to perform all the functions of producing and distributing a certain product or class of products.

What we need is a form of coöperative organization that, with modification to meet the particular conditions and to conform to particular purposes, will apply to all industrial enterprises in which there are common interests to be served or in which the efforts of individuals are combined. Whatever economic interest is primarily to be served, by any industrial enterprise, for the protection of the rights of all other interests, for the ultimate success of the particular industry, and for the security of the general prosperity, it must conform to the fundamental economic and social principles elsewhere laid down. When this is done, it matters not whether the enterprise is initiated and organized in the interest of producers or in the interest of consumers; or in the interest of any group of either producers or consumers. If all production were equitably and efficiently organized, it would follow that all the needs of consumers would be taken care of, to the extent of our productive capacity. If all our interests as consumers were adequately protected and cared for, it would follow that production would be equitably and efficiently organized, because in no other way could we care for our interests as consumers. But the initiative must always be taken by some particular individual or group of producers or consumers and it may as well be taken in one interest as in the other.

The organization of a consumers' coöperative corpora-

tion would be in all respects like the organization of a producers' corporation, except that the consumer would take the place of the producer. The buyer of a thousand dollars' worth of the goods handled by the enterprise would be placed on an equality, with regard to control and management and the division of surplus, with the one who contributed a thousand dollars' worth of labor or invested a thousand dollars' worth of money capital. And his contribution to the enterprise would be exactly equal to either of the others. It would be of the same value to the enterprise, and it would represent the same amount of labor, since the buyer of the product must have earned the money with which he bought it. He would have as much at stake, and would be entitled to and would receive as much protection. The buyer of a thousand dollars' worth of products would receive back the equivalent of his contribution when he received the products, just as the person contributing labor would receive in wages the value of his services. In the case of a consumers' coöperative, however, the primary purpose is to effect a saving to the consumers contributing to the enterprise. This will be accomplished, first, through the proportionate share in management enjoyed by each contributor; second, by his sharing in the "corporate surplus"; and, third, by the use of "public surplus" for the maintenance and betterment of plant and the retirement of capital, thus reducing costs and lowering prices. And producers of the products bought by the corporation for its members would also share in the results of its efficiency, since the improvement of plant and retirement of capital out of public surplus would be in part reflected in higher prices to producers.

With modifications to suit particular conditions and to conform to particular purposes, the plan will serve as well for an enterprise engaged in both the buying and the sell-

ing of products, as for one that discharges all the functions of production and distribution. In the Northwest, farmers' coöperative elevators often buy lumber, coal and other supplies for their members. Patronage dividends are sometimes distributed to the buyers of these products, as well as to those whose grain is handled by the elevators. This approaches the principle of economic coöperation. Under the proposed form of organization, control and management, as well as the profits of the enterprise, would be shared by all who sold or bought through the corporation, proportionately to the amount of products either bought or sold, or to labor or money capital contributed to the carrying on of the enterprise. If a member sold a thousand dollars' worth of grain through the elevator, and also bought a thousand dollars' worth of coal, lumber or other products supplied by it, there would be issued to him two shares of labor stock; he would have two votes in the determination of policy and control; and he would be entitled to a dividend out of surplus equal to that of an employee earning at the rate of two thousand dollars a year, or to the investor of capital whose preferred dividend was two thousand dollars a year. If a member worked for the corporation, receiving wages at the rate of a thousand dollars a year, contributed capital on which the preferred dividend was a thousand dollars a year, sold through the elevator a thousand dollars' worth of grain, and bought from it a thousand dollars' worth of products, his vote in the control and management of the corporation would be on the basis of four shares, par value one thousand dollars, and he would share in surplus on the same basis. This would be the real measure of his interest in the corporation. He puts in money for the financing of the enterprise that is worth to it a thousand dollars a year. This represents an accumulation out of the product of his past

labor. He brings in a thousand dollars' worth of grain to be marketed, which represents labor performed or money expended in growing the grain. He buys a thousand dollars' worth of coal, lumber or other goods, with money representing labor expended, and he contributes a thousand dollars' worth of labor directly to the success of the enterprise.

In this case, both producers and consumers belonging to the corporation would share in corporate surplus; and both would share in public surplus, to the extent that consumers' prices were reduced, or producers' prices advanced by increased efficiency and reduced costs. And each would share in such increased efficiency in the exact ratio of his contribution to the efficiency of the enterprise.

This plan of industrial organization, as applied to marketing, offers wonderful possibilities in unifying the interests of producers and consumers. It is entirely possible, for example, that producers and consumers of staple farm products might unite in the same organizations, thus completely eliminating the inefficient or profiteering middlemen, who have caused both producers and consumers so much trouble. As we have indicated, a single coöperative organization might advantageously sell the products of its members, and at the same time buy for them certain other products. There are situations in which it might prove advantageous for both producers and the consumers of all the products handled to unite in a single organization. For example, fruit-growers in the State of Washington might sell fruit to grain-growers in North Dakota, and grain-growers of North Dakota might sell grain or mill products to these same fruit-growers, through an organization mutually controlled by them, on the basis of the value of their several contributions to the enterprise, whether in money capital, labor, or goods bought or sold.

The same might be done between coal-producers and farmers; between dairymen and grain farmers; or between lumbermen and farmers, etc. It would in no case be necessary for either a producer or a consumer to do all his business with a particular organization; but the incentive would be strong for him to do so. That would be as the coöperators should determine. But if all coöperative or associative industry were organized on the same plan, all the interests of producers and all the interests of consumers would be equally protected and promoted.

This plan would supersede numerous trade practices now in vogue, intended to stimulate trade, to distribute special advantages or to provide a more equitable distribution of the products of industry—such as patronage dividends, rebates, bonuses, trade discounts, special dividends and stock dividends. The legitimate purposes aimed at by all these devices would be accomplished by the division of surplus proposed; and the distribution of benefits would be absolutely equitable. Every one would get out of industry the exact equivalent of what he puts into it; and the apportionment would be brought about by an automatic process—not subject to the determination of the variable uncertain or prejudiced judgments of industrial magnates or so-called impartial tribunals.

Democratic and economic organization of marketing would preserve or restore all the beneficial elements of competition. Within each industry there would be competition in efficiency, but no competition for markets. Separate organizations handling the same products and selling in the same markets would compete with each other and with any such individuals or unincorporated marketing associations as might be engaged in the same business. There would be no monopoly of any marketing facilities, unless all interests affected should unite in a single organization.

Then all competition would be eliminated, except internal competition in efficiency. But no other competition would be needed, because all factors in production would be coördinated for the accomplishment of the common purpose of distributing the goods that all produce in accordance with the needs of all consumers, and any surplus accumulated because of the monopoly would be equitably distributed between both producers and consumers. Competition would be superseded by coöperation, and coöperation would be on a basis of the highest efficiency and the most exact justice.

By bringing producers and consumers closer together, this plan of marketing would lead to a much better adjustment between production and consumption—between supply and demand. "Overproduction" of certain classes of goods could be practically eliminated. The glutting of markets could be prevented. Scarcity of necessaries in one part of the country, while great quantities of the lacking product was rotting in another part for want of a market could be done away with. Prices could be stabilized by the proper adjustment of supply to demand and the orderly distribution of seasonal products throughout the year. Once these adjustments were made, it would not be difficult to adjust credit to the requirements of the marketing activities themselves, as well as to the needs of both producers and consumers.

Thus, the plan will go far towards removing all the evils of the existing marketing system. It will establish a marketing service that will enable us to exchange the products of our industry at the least possible cost and with the greatest measure of equity. It will do this because it is based upon the fundamental principles of industrial, social and political democracy.

XVI

THE FUNCTION OF CREDIT

ALL coöperative industry is carried on by means of credit; and industry is coöperative wherever it concerns two or more individuals. If one person produces things that are consumed by another there is coöperation, and credit is involved in the transaction. The consumer is dependent upon the producer for the products supplied to him, and the producer is dependent upon the consumer for his market. Each credits the other with the ability and willingness to carry out his part of the transaction.

Furthermore, where one person supplies goods to another he expects a return in goods or services of equivalent value. One can not expect to have goods to satisfy his wants unless he returns goods of equivalent value. No one will produce goods in excess of his own requirements unless he can sell them, and no one can buy them unless he can produce their equivalent to sell in exchange.

Anyone who produces things, or is able to perform services that are desired by others, contributes capital to industry. He is the creator of a certain amount of ability to satisfy economic wants. That constitutes his capital, and his share of the entire capital of the economic community. His ability to produce such things or to deliver such services gives him a proportionate claim upon all the things that may be produced or the services that may be rendered by others. This claim is the basis of his credit. Where an individual actually performs services in the satisfaction of the wants of others, he is entitled to equivalent services

in the satisfaction of his own wants. He has established a definite demand upon the services of others. If he receives and consumes equivalent goods or services from others, the claim is satisfied and the credit is extinguished. The credit is never extinguished until the equivalent goods or services are received and consumed. Goods may be bought or services paid for with money, but money is valueless, except in so far as it will buy things or services that will satisfy wants or that can be used in the production of such things. When goods are sold for money, a particular claim upon capital is exchanged for a general claim. That is the function of money—it generalizes credit.

Individual Credit. One who has contributed his services to industry and has received payment therefor in money may buy with it things or services to satisfy his wants, or he may acquire capital to use in production. We have become accustomed to think of credit in the latter sense. But credit for consumption is more fundamental than credit for use in acquiring capital for production. No one wants to produce goods unless he can sell them, and goods can not be sold unless there is some one who is able to buy them; that is, some one who has acquired the necessary credit, through the performance of services or the delivery of goods, or by giving evidence of his ability to perform services or deliver goods in the future.

We have shown that all services may be defined in terms of labor; also that all material wealth is the product of labor. We may, therefore, regard every contribution to industry as primarily a contribution of labor. All wealth is measured in terms of the satisfaction of wants. It is that and that alone which gives value to either goods or services. On the other hand, goods represent human energy expended. The amount and quality of energy expended in any case measures the claim that the producer

has upon the total stock of goods in existence, and his relative claim upon the total ability of the economic community to produce more goods or to perform additional services.

We may therefore consider credit as a method of exchanging economic services.

Any person may use his credit directly for the immediate satisfaction of his wants, or he may use it for purposes of production. He may exchange his individual demand upon the services of others—his capital—for goods to be used in a productive enterprise carried on by himself alone, or he may invest it in a coöperative enterprise. In either case, his purpose is to acquire a claim upon the services of others equivalent to the services he contributes. In such case he will want to share, and will be entitled to share proportionately with those with whom he coöperates, in the total proceeds of the enterprise, which will consist of a demand upon the services of those engaged in other enterprises, whether engaged in individual or in coöperative industry. His ultimate purpose is to acquire a claim upon the total capital of the community proportionate to the amount of his contribution to it.

Coöperative Credit. Where a number of individuals coöperate in a particular industrial enterprise, a new economic unit is created. A group credit is established. This group credit is based upon the several contributions of the services of the members of the group, or of material wealth representing their services; but it does not consist merely of such contributions. Coöperation is for the purpose of facilitating production, and to the extent that in any case it does so, the capital of the enterprise is increased, and its basis for credit is enlarged. As in the case of the individual, the capital of the coöperative enterprise consists in its total ability to produce and deliver want-satisfying goods or services; and that ability is the measure

of its credit. It must offer for the additional labor or material capital it requires such inducements as will be satisfactory to the owners of such capital. It must create in them a belief, a confidence, that it can and will pay wages or dividends, and that it will preserve and return material capital intact. The enterprise that can make the best showing with regard to these things will have first call upon both labor and money capital; it will have the superior credit.

When coöperative industry is democratically organized, the credit of every enterprise and of all enterprises—of industry as a whole—will be accurately measured by value in production—ability to satisfy wants. Each enterprise in the course of its producing operations, uses a certain quantity of the aggregate credit of the community and returns it in the shape of the goods it produces or the services it renders. It receives the credit of individuals and private associations when it takes their services or their money or property for its uses, and returns, as costs, interest, wages or dividends, the amount of credit employed, the total being taken out of the charges it makes for its products. It does not accumulate credit. The credit returned will always equal the credit received, plus the efficiency added by the enterprise; and the results of this efficiency also will be in the course of time divided between the investors of labor or money capital on the one hand, and the consumers of the products of the enterprise on the other. Therefore, under the proposed plan, every individual and every interest will acquire a claim upon the total production of the enterprise equivalent to his or its contribution to such production.

Thus will be removed the chief cause of all our credit difficulties. We have shown elsewhere that demands upon production accumulate as monopoly profits, until they im-

pair the buying power of the people, absorb productive credit that is needed in other industries and fix upon industry a burden of investment charges that it can not possibly carry. This evil will be entirely removed by the democratic organization and conduct of industry. Profits—surplus—will be distributed as fast as they accumulate; and those who receive profits can use them only in the satisfaction of their wants or for investment in individual or coöperative industry. Individuals will accept such investments only for productive purposes, since they can repay them only by producing an equivalent in goods or services. If they are invested in coöperative industry it will be on an absolute parity with labor and other capital; and surplus will again be distributed equitably between the producing and the consuming interests. No corporation will be able to amass profits and absorb credit, because one half of its surplus must always be set aside for the benefit of consumers, and the other half will be distributed among all investors of labor or money capital proportionately to the value of their several contributions.

Consumers' Credit and Producers' Credit. Thus, when industry is democratically organized, credit used in production will be released as fast as the processes in which it is employed are completed. The life of a credit transaction is exactly equal to the duration of the activity receiving the credit. There will be a constant flow of productive credit exactly corresponding to the volume of production. Credit employed in any enterprise will be released as fast as its products are sold; that is, as fast as it gets back the equivalent of its contribution to production as a whole. Credit so released goes back to those from whom it was obtained, as interest, wages and division of surplus—the latter including all increased ability to produce—who then may reinvest it, or use it in the satisfac-

tion of their wants. If, at any time, there is more capital than is needed for use in production, returns on investments will decrease, and more credit will be used in consumption. If, on the other hand, there is a scarcity of productive capital, industries will bid up for it, in order to induce those who held demands upon production to release them for capital uses, instead of demanding goods or services for immediate consumption. Thus there will be an automatic adjustment between consuming and producing credit. And this is the only way in which the adjustment can be justly and effectively made. Any other method would be unjust, because it would deprive individuals of the equal right to dispose of the products of their own labor. It would be inefficient, because it would be in one way or another an arbitrary apportionment between consumption and capital uses, instead of an adjustment in accordance with economic principles.

Corporate interests have recently attempted to justify the accumulation of profits on the ground of the necessity for the conservation of capital. It is assumed that if workers receive more than enough to buy bare necessaries, they will expend it in riotous and extravagant living. At the same time it is assumed that any surplus taken as profits will not be so expended. It is even frankly put upon the ground that, under the present control of industry, profits will be so great that they can not be consumed, and that therefore those who receive them must find investment for the surplus. Obviously, this is wholly to ignore the equities of the problem. It is not only held that capital interests are as of right entitled to all the interest and profit they can get, but also that they must be allowed to take all they can get, in order that there may be enough capital for use in production.

One other method of accumulating capital is urged by

corporate interests—that of personal thrift. Thrift has been urged as persistently when there was so great a surplus of consumable goods that producers were being bankrupted for the lack of markets, as when there was a real or apparent danger that there would be a shortage of goods for consumption. During the period of depression beginning in 1920, the excess of such goods, consisting largely of farm products for which there were no markets, could have been employed for productive purpose only as support for the workers engaged in production. If all workers had been employed, they would have consumed most of the surplus; and since there was a surplus of consumable goods, they would have been engaged in enterprises largely concerned with the production of capital—buildings, equipment, etc.—until the surplus of consumable goods had been used up, or until there appeared a relatively greater need for them for capital uses. Thus, we should have consumed our surplus of consumable products in the production of needed capital; and that is the only way in which such surplus could be employed in the production of capital. What we did was to waste billions of dollars' worth of human energy, organization and material facilities, by allowing them to lie idle while the surplus of consumable goods was being used up.

"There is no loss to our national industry so irretrievable as that caused by idle plants and idle men." And there is none so needless and inexcusable. When plants and men are idle because of a surplus of consumable products, it ought to be plain to every one that any saving in consumption of such products only makes matters worse. It does not add to capital, because the products saved either could not be used for productive purposes at all, or there is already more than enough for both consumptive and productive purposes. It directly diminishes capital,

because it halts production. All idle plant capacity is valueless during the period of its idleness. Not only that, but it is deteriorating in value because of idleness, or is eating up other capital employed in its up-keep. But the waste of material capital is not nearly so serious as the waste of human energy. There is not only the loss of the goods that might have been produced, but an even greater loss in the deterioration of ability due to undermaintenance, and the impairment of morale due to enforced idleness.

Those who justify the accumulation of monopoly profits, and at the same time urge general thrift as a means of accumulating capital, overlook or ignore a fundamental contradiction between the two propositions. Profit represents the difference between costs and selling prices. Costs consist chiefly of wages and what is paid for raw materials. A large part of all raw materials is produced by farmers, who have no share in corporation profits. Wage-earners and farmers make up the great majority of consumers; and their ability to consume or to save depends upon their wages or the prices they get for their products. Any advance in consumers' prices also decreases their power to buy for consumption or to save for investment. When industry is so conducted that all surplus is capitalized into profits, it is obvious that those who do not share profits will have nothing to save. Under such conditions, saving on the part of the majority of the people can be accomplished only at the expense of proper sustenance; and that, as we have seen, results in a capital loss that is much greater than the capital gain due to abstinence, even though the products saved are needed and fit for capital uses. Where the products saved by abstinence are unfit or not needed for capital uses, there is a loss both ways; there is an impairment of both material and labor capital, measured by the amount of the former that could have been pro-

duced if consumption had been adequate, and the loss in energy due to undermaintenance.

Furthermore, a saving out of goods not fit or needed for capital uses results in the fixing of a charge upon all capital equal to the amount of the saving. If one should save in a year a bushel of wheat by restricting his consumption of bread, when there is already more bread than there is a demand for, he does three things: first, he wastes the bread, since he prevents it from serving its economic purpose, that of satisfying wants and sustaining productive energy; second, he reduces the market for wheat below the normal economic level, making it necessary for producers to adjust production accordingly—that is, to a level of inefficient subsistence; third, he creates a charge upon general productive ability equal to the amount of his abstinence. His own productive power will be diminished by the amount of the product "saved." The earning power of the producer of wheat will be decreased at least in like amount by the narrowing of his market. And industry as a whole will have added to its burden of investment charge the amount of the so-called saving, and will have received neither goods nor services to off-set it.

There may, of course, arise a situation where it is necessary to provide capital out of what is desired for consumption. In such a situation the accumulation of monoply profits would only make matters worse, because they might or might not represent real capital, and because they would be taken from wage-earners, independent producers or consumers, thus lessening their ability to save. Accumulated profits would be less likely to go where capital was most needed, because their concentration in a few hands makes possible a monopoly of capital. On the other hand, if all surplus were distributed, interest rates could be advanced high enough to secure the necessary capital. It would then be

necessary to increase efficiency so as to cover the additional interest payments, for labor to accept lower wages, or for consumers to pay higher prices. The amount drawn from consumption would then be taken from the earnings of producers according to their accumulations above immediate needs or according to their present earnings, and from consumers according to the amounts they severally consume. If the capital increase is covered by increased efficiency, wages will be advanced and prices reduced to where they were at the beginning, and the additional interest charge will be no additional burden upon production.

Under the democratic organization proposed, capital could always be secured by voluntary assessment upon the coöperators, if there were not enough obtained by offerings of bonds or stock. This would be accomplished with exact equity and with no danger of disturbing the equilibrium between consumptive and productive credit. It would come from investors of labor or money capital in proportion to their several interests in the enterprise. If necessary, and if market conditions were favorable, selling prices would be advanced to cover the additional interest charge, in which case a part of the withdrawal from consumption would be still more widely distributed. In any case, the additional charge for capital will finally be paid by consumers. Under industrial democracy it will be equitably distributed among consumers. And consumers will be paying for actual capital; not for a release of a charge upon capital that may or may not represent any contribution to capital.

The Progressive Increase of Credit. We have thus far spoken of credit as though it were created wholly by separate individuals or industrial enterprises. This has been necessary in order to keep clearly in mind the fact that all production is accomplished by the efforts of indi-

viduals, working singly or in coöperation, and that all claims upon the products of industry—all credit—are thus established. But there is what we may call a social increment to credit so created. Success in any industrial enterprise that is conducted in accordance with economic principles makes success in all other enterprises easier and more certain. The progressive increase in consumption, due to the development and expansion of wants, helps all industry, in that it enlarges the markets for its products. It increases the value of capital, and therefore it increases the volume of credit. The discovery and development of natural resources aids all industry. Every invention, every improvement in organization, every increase in labor efficiency, and every improvement in industrial policy increases productive ability and therefore enlarges credit; in all industry, as well as in the one in which the improvement is made.

We have seen that under the present organization of industry, all increase in productive ability tends to be progressively capitalized into profits; that this results in a concentration of buying power, to the impairment of general buying power; in the accumulation of oppressive investment charges against production; and finally in the curtailment of production to adjust to lower consumption. So that the full possibilities of increased production are never realized. The social increment to capital is wasted during periods of depression and hard times.

How much would this increase be, if it were not thus wasted? Economic experts and engineers have recently estimated that under the present system production could be increased from 40 to 100 per cent. These estimates are concerned only with the various processes of production. They take no account of the losses due to the maladjustment of buying power—credit—which is much more than

all the waste that could be eliminated from the processes of production. The late Mr. H. L. Gantt, one of the ablest of statistical economists, estimated that American industry was running at less than 20 per cent. efficiency in 1919. Toward the close of the war, English economists were talking of "super-production" as a means of making up war losses and restoring industrial prosperity. On the basis of what had been accomplished under war conditions, they estimated that when peace was restored it would not be difficult to increase production 300 per cent. above the best pre-war year. It is obvious that the possibilities of increased production are greater in this country than in England. But if we take the average of all these estimates as representing our possibilities, we have a figure of 260 per cent. This would give us an annual production of over $216,000,000,000 on the basis of 1919 production and money values.

It is therefore obvious that if all our productive energies could be realized, there would be little danger of an impairment of capital. And the thing most in the way of the full utilization of all our productive energies is the impairment of general credit—buying power—by the absorption of the earnings of the people into undistributed profits. Industrial democracy will distribute profits, release buying power, and thereby liberate all our energies for maximum production. It will once and for all remove all danger of a shortage of capital for production.

Investment credit. Investment credit is that by which the permanent capital of an industrial enterprise is acquired. It is usually obtained by the issuance of bonds or stocks, or by the execution of notes, secured by mortgages. Capital so acquired is used for the development of natural resources, the building and equipment of plants, the development of markets, the perfection of processes, and

often for the payment of wages and costs until earnings are available for such purposes. Such credit is to be distinguished from credit used in the current process of production. A farmer uses investment credit for buying and improving land, constructing buildings or purchasing brood animals, while he uses another kind of credit for buying seed, paying wages and for moving and selling his crop. The latter is usually called seasonal, or "short-time" credit, and is similar to the credit used by manufacturing and business enterprises for the carrying of manufacturing or buying or selling operations. It is a credit employed for the time of the business "turn-over," which, in the case of the farmer, means the time extending from the planting of the crop until it is harvested and sold and the money received for it.

Like seasonal or short-time credit, investment credit is paid out of production. All credit should run with production, because production is the basis of credit. The difference between seasonal and investment credit is that the former is paid out of the proceeds of the season of "turn-over," while the return of the latter is usually distributed over a period of years. The distribution of payment should be made, and usually is made, as nearly as can be estimated in accordance with the earning power of the capital borrowed. If a farmer can increase his earnings $100 a year by building a silo that will cost $1000, he will be able to pay 7 per cent. a year interest, and have a profit for himself of 3 per cent. If he saved his $30 a year and invested it at 5 per cent., he could pay the principal of his loan at the end of twenty years. Under such conditions, he would require a loan for twenty years. If his silo would earn for him $60 a year for forty years, in addition to the cost of up-keep, a loan for forty years, amortized at 6 per cent. would meet his needs. But the loan should not run

for forty years if the facility acquired with it is exhausted in twenty years. Nor should it be for less than forty years, if its value in production can not be realized in a shorter time.

Likewise, the investor who wants his money placed for a period of twenty years will not choose an investment that will be returned to him in ten years. If he wants the entire investment returned at a certain rate per year he will choose an amortized loan, just as the borrower will choose that kind of credit, if the returns come in at that rate, and if he have no additional capital requirements. If the investor wants his capital kept intact for twenty years, having use for the annual interest, he will choose an investment on which only the interest will be paid each year, and the principal returned at the end of the investment period.

So that both in the interest of the borrower and in the interest of the lender credit should run with production; and production should always measure credit. Credit is a demand upon capital; and capital is ability to produce and deliver things of value—want-satisfying goods or services—or goods or services useful in production as, when and where required. Where one person possessing such a claim does not want to enforce it in the purchase of goods for consumption within twenty years, and another wants to buy for immediate use in production an equivalent amount of capital, an exchange of credit may be made to the advantage of both. Each delivers to the other a claim upon a certain amount of ability to deliver things of value, as, when and where required.[1]

Credit will run with production, if all credit represents production, and if it is distributed according to production. Credit will not run with production, if claims accumulate that do not represent equivalent services in production.

[1] "Credit Power and Democracy." C. H. Douglass and A. C. Orage.

Investment credit is available for a given industry to the extent that it has been produced and is not in use in other industry. The borrower can obtain such credit when he is able to convince the owner of a claim upon the needed surplus capital that he can and will produce and return the amount borrowed, with a payment for its use, at a stipulated time in the future; that is, when the borrower himself has equal credit. With all claims on production distributed proportionately to contributions to production, everyone will have exactly the amount of credit he creates. This will apply not only to past production, but to production that is to take place in the future.

Bank Credit. The current transactions of modern industry are carried on almost entirely by means of bank loans. The proper function of a bank is to facilitate the exchange of credit—the transferring of demands on ability to produce. Bank credit is properly a method of transferring such demands for use in the current processes of industry and business. Banks receive deposits of money from people who have no immediate use for it. They also receive the deposits and carry the accounts of industrial and business enterprises. They make loans based on these deposits and accounts. Banks also borrow and lend money, buy and sell bills of credit and exchange, make collections and do other financial business. For our purpose it will be necessary only to consider the taking of deposits, the carrying of accounts and the making of loans.

It is found in banking practice that loans may safely be made up to a certain percentage of the capital and deposits of a bank. There are legal limitations imposed by the federal government for national and reserve banks, and by the State governments for State banks. These limitations are for the protection of depositors in banks that otherwise might go beyond the limits of financial safety.

We are not here concerned with the merits or demerits of these regulations, or with the question whether or not the banks keep within them. They are mentioned only for the purpose of throwing light upon a peculiar condition of the banking business. It is this. When a bank makes a loan, the borrower gives his note for the amount he borrows. The note is made an addition to the assets of the bank, upon which it may make further loans. The borrower then deposits in the bank, or in some other bank, the money paid him in exchange for his note. The note calls for the delivery of money at a specified date in the future; it is a claim upon money, which is a claim upon all production. This process may be repeated as often as loans are made and redeposited; the bank, in each case, obtaining an addition to its deposits in the amount of the note taken, and an equal addition to its assets, as a basis for making further loans. It would seem that the more loans a bank makes the more it is able to make—that it might pyramid its loans indefinitely. It would seem, also, that the bank gets the re-deposits free, and that the interest it draws on loans based upon the notes of borrowers will be clear velvet. It even appears that under certain conditions, banks may make loans up to several times the amount of their reserves. In the federal reserve system, an original deposit of twelve dollars will support a hundred dollars of loans; that is, loans may be made to the amount of more than eight times deposits. The difference is, of course, in part secured by the capital and surplus of the bank; but none the less all loans in excess of original deposits represent an inflation of bank credits in excess of economic credit. To the extent of such inflation bank credit does not run with production. It results in an accumulation of a charge against production in the hands of persons who performed no equivalent service in production.

The possibilities of the expansion of bank credit are for another reason so great that we need not concern ourselves as to the exact amount by which banks may pyramid loans upon other loans. Banks deal in money. They buy and sell money credit. Their business is that of effecting exchanges of generalized demands on production for other generalized demands on production. These demands may or may not represent equivalent production. All that the bank need concern itself about is that loans will be repaid in money and that the money in which loans are repaid will buy at least as many goods or services as the money loaned. Loans are made to business enterprises in proportion to their ability to pay money. This means in proportion to their profits. And monopoly profits do not necessarily represent production. They represent the difference between cost and selling prices. Bank credit therefore does not run with production, but with profits. Even where wages are advanced, or higher prices are paid to farmers or other independent producers, this only increases the volume of business to the extent that the traffic will bear; profits are computed on the volume of business. Bank credit aids this process. The result is inflation of both business and credit, as measured by production.

This increases the cost of living; that is, it impairs consumptive credit. It increases the cost of credit to actual production, since the volume of credit keeps pace with the volume of business, and must be paid for on that basis; and a unit of inflated credit will not perform the service in production of a unit of uninflated credit. A loan of a thousand dollars to buy farm machinery is worth only five hundred dollars to the borrower, if the prices of farm machinery have been inflated one hundred per cent.; and prices are inflated when the volume of business is inflated.

The result of such inflation is that all advances in wages

and all advances in the prices of the products of farmers or other independent producers are absorbed in the profits of transportation, marketing and other industrial corporations and in profits of the banks. The economic credit created by producers is absorbed into financial credit, which finally is added to the vested charge against production.

This absorption of credit, as elsewhere shown, leads inevitably to credit deflation and the stagnation of industry. There comes a time, as there did in 1920, when the receipts of farmers will no longer sustain the volume of credit necessary to enable them to pay increased wages, transportation charges and the prices charged for implements, machinery and supplies. At the same time, consumers' prices have increased out of such proportion to wages that the buying power of wage-earners also breaks down. Products congest on the market; farm prices crash downward, dragging all other prices with them; plants close; workers are discharged; consumers' credit is still further reduced; and production is readjusted to the lower level of consumption. This results in further unemployment, and consequent impairment of consumers' credit, until, as business interests say, the bottom of the trough of depression has been reached.

What is that trough of industrial depression, and how do we get out of it? In the language of the experts, we begin to climb out when every one has taken his losses. It seems to be assumed by the experts that losses will in some way be equalized, and that the total will represent the amount that business has been inflated, so that after all losses have been written off, we shall be on a "normal" basis and ready to start over again. But it is evident that losses are unequal. It is equally evident that they are greatest among those who benefited least from high prices; that is, in the industries that were least inflated. During inflation,

every interest boosts prices as fast and as far as possible. During deflation every interest holds its prices as long as possible. It is admitted that the powerful corporations have the advantage both ways. They take the greater profit when industry is expanding, and they are better able to resist reductions when industry is contracting. The banks, being closely interlocked with the great industrial corporations, naturally aid them both ways.

As among producing interests, farmers and wage-earners are the greatest sufferers from inflation. This is because general prices advance faster than wages or farm prices. They are also hardest hit by deflation, because farm prices go down first, industry is halted and workers are thrown out of employment or have to accept lower wages; so that the earnings of these two classes are reduced faster than the cost of living or the cost of carrying on farm operations is reduced. This goes on until primary producers—chiefly the farmers—and wage-earners have lost all the advantages they had seemed to gain by inflation. They adopt lower standards of living, and production is adjusted to these lower standards.

Meanwhile, the highly organized industries have invested their surplus profits, partly by increasing their own capitalization, on a basis of inflated prices, and partly by buying farm mortgages and public securities issued for the purposes of relieving the distress of deflation. Thus, those who gained most from inflation are able to capitalize the very distress caused by the resultant deflation.

All this takes place as an inevitable result of the operation of industry under the present scheme of organization. It is a necessary result of the control of industry by privileged interests, under a scheme that assumes free competition, which is non-existent because there are privileged interests. After the disastrous slump of farm prices that be-

gan in 1920 was well under way, it was widely charged that financial interests conspired with the federal reserve banks to withhold credit from the farmers, so as to force them to sell their products for lower prices. It must be said that there was much evidence that seemed to support this charge. It appeared that bankers and even the federal reserve board itself, in their attempts to refute these charges, practically admitted that banking policy has been shaped to that end. But whether there was such a conspiracy or not is of little importance to the analysis of the entire economic situation—in relation to the fundamental forces that brought about the near ruin of the farmers. During the entire period of inflation, the farmers were enlarging their operations, increasing their output and developing their productive capacity. They were increasing their economic credit. But their financial credit did not proportionately increase. Being at the bottom of the inflation scale, they did not participate in the geometrical increases in profit that were accumulated between them and the consumer. On the other hand, these increases had been added to nearly everything that the farmers had to buy. It would have been no better if farm prices had been maintained at the war levels, so long as all other prices kept soaring. The margin between the farmer's costs and his gross receipts would have become constantly less while the margin between the costs and the gross receipts of highly organized and privileged industries would have grown constantly greater. This margin is the measure of financial credit. So that the credit of the farmers disappeared by the automatic operation of inflation. Deflation came as a direct result of this disappearance of the farmer's economic credit; and it would have come with or without a conspiracy to deny financial credit to the farmers.

As financial credit is measured by price in relation to

cost, it might seem as though farm credit could have been maintained by fixing farm prices on the basis of costs of production. It is quite possible that the fixed price for wheat that was retained until the middle of 1920 did delay the catastrophe that overtook grain growers. But it could have done no more than delay it. Dealers' and manufacturers' profits, reflected in consumers' prices, were geometrically pyramided upon that fixed price. So that the economic credit of the farmer on the one hand and the economic credit of consumers on the other would inevitably have been absorbed into the increasing profits of those between. It is the same with the wage-earner. The wage of the worker measures his claim upon total production. But every advance in wages is made the basis for increased profits, that pass ever into the consumers' prices, diminishing the amount that the worker can buy with his wages. Thus the economic credit—the ability to produce—of the worker goes ever into profits and constitutes financial credit in the hands of those who accumulate profits.

It is obvious that no real and permanent relief would be afforded to the workers by advancing nominal wages, nor to the farmer by arbitrarily fixing prices. Nor would real relief be afforded the farmers by increasing money issues, so long as the present possibilities of business expansion through the inflation of bank credit remain. The same is true of lumbering, fisheries, coal-mining and every other primary industry, except where they are protected by special privileges. The independent business man is no better off. He will always in the end find his profits eaten up by increased taxes, wages, interest, transportation charges and other costs, or sunk in the pit of industrial stagnation that is bound to follow every period of inflation. While monopoly interests have the advantage both in inflation and in deflation, their sales will diminish and their profits disappear,

as the buying power of wage earners, farmers and unprivileged business is decreased.

The Function of Banking. We have shown that the fundamental evil in our credit system is to be found in the fact that financial credit does not correspond to economic credit—it does not run with production. It runs with profits. Current credit is based on volume of business, instead of on volume of production, and the volume of business expands in a geometrical ratio, by the pyramiding of profits upon costs. Bank credit, like investment credit, naturally follows profit; it goes to those who are able to absorb the surplus of production—including estimated ability to produce—overconsumption. It follows that if those who do the actual work of production could retain the surplus they create, their financial credit would equal their economic credit—the economic value of their services in production. Under the plan of industrial democracy proposed, there could be no pyramiding of profits, because all along the line surplus would be distributed, one half to producers and one half to consumers; that is, one half to all producers according to what they consume, and one half according to what they contribute to production. The half distributed to consumers would keep down production costs, in the case of goods bought for use in production, and would keep down living costs and maintain buying power, in the case of goods finally consumed. The half distributed to producers would stimulate efficiency. Productive and consumptive economic credit would be automatically balanced. Profit would go to producers, either in their capacity as producers, or in their capacity as consumers. Production would be balanced with consumption. Credit would still follow profit, but it would also follow production. Bank credit could safely be issued in accordance with the business needs of every industry, which would be in propor-

tion to the volume of production, since the volume of business and the volume of production would be the same.

This credit should be issued through banks, and it should be issued in the form of money, as is done under the present system. It should be in money that would be retired when the industrial process for which the credit is employed is completed, unless needed for the carrying on of other production processes. Money—representing a generalized demand upon production—used in particular productive industries, would be progressively redeemed by the assimilation of the products of those particular industries into the general store of things of value. All the evils of inflation and deflation would be eliminated, because there is neither inflation nor deflation so long as credit corresponds with production.

Banks will be organized on the same principles as other industries. They may be organized and conducted primarily in the interest of either depositors or borrowers, or in the interest of both. Whether depositors or borrowers take the initiative, the function of the bank will be to provide financial credit corresponding to the economic credit of those whom it serves. If a bank is organized primarily in the interest of depositors, every deposit will constitute an investment in the banking enterprise. Depositors will share in management and control and in the division of surplus on the same basis as those who contribute the capital of the bank. The depositor will receive the current rate of interest, according to the nature of his deposit, just as the contributor of labor to a productive enterprise will receive the current rate of wages. Money capital will be contributed in accordance with the plan for share investment in basic industries.

Labor and management will share in control on the same basis as in industrial corporations, each employee or of-

ficial whose wages or salary is a thousand dollars a year, or at the rate of a thousand dollars, sharing equally with an investor of capital whose investment earns him a thousand dollars a year. We have placed depositors on the same basis with labor, with regard to division of surplus, for the same reason that in the organization proposed for marketing we placed the producer bringing in a thousand dollars' worth of products to be marketed on the same basis with labor. The thousand dollars' of deposits represents a thousand dollars' worth of labor, as does the thousand dollars' worth of products. It represents in either case an equal interest in the enterprise, entitling the contributor to equal part in control and to an equal share in the distribution of surplus. There seems to be, however, a practical difficulty in the way of depositors' sharing in control and in the division of surplus. Many depositors have money in the bank only for a short time. The deposits of many others will fluctuate according to their business requirements. There are, in fact, comparatively few depositors who keep uniform amounts of deposits in the bank for a year or more at a time; and those who do are usually savings depositors or the custodians of permanent funds. But the average deposits of individuals or associations engaged in industry or business are fairly constant; so that the vote of the depositor and his share in the division of surplus may be based upon his average annual deposits, in the same manner that the share of the contributor of labor is based on the yearly rate of his earnings. The stock issued to depositors would be non-transferable and valid only so long as its holder remained a depositor, as in the case of labor stock.

There will be a necessary variation in the organization of a bank on the democratic plan, owing to a peculiarity of the banking business. Borrowers may be regarded as con-

sumers of credit; but borrowers from a bank are also depositors in the bank. If every borrower redeposits the amount of his loan, he will share in control and management and in the division of surplus on the same basis with depositors who are not borrowers. So that, in the case of a bank, the consumer's interest is satisfied out of corporate surplus, while in industrial enterprises it is satisfied out of public surplus. For these reasons, the bank need include in public surplus only such amounts as are necessary to maintain the surplus or reserves required by law.

With banks, as well as with all other coöperative industry so organized, those who create credit would control credit. Every thousand dollars deposited would represent an exact equivalent in services rendered in production—that is, it would represent real, economic credit. Every thousand dollars borrowed and redeposited would represent the productive ability of the borrower, which is likewise real, economic credit. The depositors of both classes would hold the majority of the votes that would control the policy of the bank. Depositors would be paid current rates of interest on their deposits, and borrowers would be charged current rates on their loans. And then all would share in the division of surplus according to the average of "daily balances" maintained. The result would be the long-sought-for "credit at cost." This, with the automatic adjustment of investment credit already explained, would render forever impossible the domination of industry by financial interests. The banks would perform their true function of supplying a credit service to productive industry. They would be controlled by producers, instead of controlling production.

Government and Credit. Under our Constitution, only the federal government has the power to issue money and provide a medium of exchange. We have shown that the

function of money is to facilitate the exchange of credit; it is not in itself credit. It is by the use of money that particular services in production are transformed into general claims upon total production. Total production is the result of all particular services in production. The credit of every producer is measured by the value of his contribution to production, and the credit of the nation is measured by the total value of all contributions to production. The government can not therefore create credit. It can only provide a medium through which credit created by production, or based on ability to produce, can be exchanged. And government can employ the credit of the nation, which represents the total productive power of all its citizens, employing all its resources, to guarantee the repayment of money constituting such medium. The government may provide a method by which money shall be issued for actual productive purposes, secured by actual productive ability. It may then place behind such money in general circulation the entire "faith and credit" of the nation. Such money will then at all times have a purchasing power proportionate to total production, including productive ability. It will not represent an arbitrary fixed demand upon production, that will always be the same no matter how much production may decline, as advocates of a fixed money standard seem to hold should be provided. Neither will it represent a demand disproportionately large as measured by production, since it will always have been issued only for productive purposes. Such money, paid for any service in production, will always represent the exact ratio of the value of that service to the value of all services. If the value of the whole declines, the buying power of the money paid for each service will be less. If productive ability increases, the money paid for any particular service will buy more. So that each contributor will bear, propor-

tionately to the claim which his service gives him upon total production, his share in any loss due to a decline in production, and will likewise share in any gain due to an increase in productive ability.

Since, under industrial democracy, maximum production may be expected, production will tend constantly to increase. Productive ability will probably keep pace with real demand, as measured by economic wants. Therefore, the value of money that is at any time issued for use in production will tend constantly to increase. Such money will then be an efficient medium of exchange, an accurate measure of relative value and a reliable store of value. It will possess all the qualities and will perform all the functions of "sound money."

With industry—including banking—so reorganized, it would not be long before such money would be perfectly good, even if it were not formally guaranteed by the faith and credit of the nation, because it would represent the economic credit of the nation. Under such conditions, the government guarantee of money will be the highest and most authoritative attestation of an actual fact. It will be a declaration to every citizen and to all the world that the money of the United States represents actual productive ability and individual and national honesty; that, severally and as a nation, we are able and willing to deliver "things of value" in the amount represented by our money.

There are many who believe that the federal government or the States should own and operate banks. There are even some who maintain that banking should be exclusively a public function. There can be no question as to the Constitutional authority of Congress to provide such a system of money and credit for the entire nation as it may deem most suitable, provided that it does not violate other provisions of the Constitution. Any State may at any time

own or operate banks, so long as it does not infringe upon the Constitutional powers of the federal government with regard to money and credit. If the people should declare banking to be a public service, it ought to be operated under the plan proposed for public utilities. There should be public ownership and democratic operation. But there is every reason to hope that a just and efficient banking service will be provided by democratic coöperation. The bank established in Cleveland in 1921 by the Brotherhood of Locomotive Engineers has already made a wonderful demonstration of the possibilities of a bank operated not for profit but for service. It has already distributed several hundred thousand dollars of surplus in the form of depositors' dividends. As we have shown above, borrowers share in those dividends to the extent that they redeposit their borrowings. Several other banks in different parts of the country have been organized, or are in process of organization, to be operated upon the same principle. They are providing to their patrons a credit service at cost. All that is necessary to complete the democratization of these banks is to place investors of capital and investors of labor upon the same basis as depositors with regard to division of surplus, and to place depositors on the same basis as investors of labor or money capital with regard to control and management.

The Gold Standard. The money provided under the plan above outlined would be commodity money, since it would represent relative values of the several contributions to production, in the shape of a demand upon total production. The gold standard, or any so-called intrinsic standard of value, would be eliminated. But no country is on a gold basis. In so far as our money is not now a commodity money, based on the faith and credit of the nation, it is based on pure fiction. The amount of business that the

country carries on, even in times of industrial stagnation, could not possibly be carried by all the money gold in the world. Our net annual production has run as high as $60,000,000,000. This was carried with bank credit that sometimes ran over $30,000,000,000 with never more than $9,000,000,000 of money in circulation; and never more than half of this amount represented gold. All the money gold in the world is only between $8,000,000,000 and $9,000,000,000.

Though all the money gold in the world would not pay one year's interest on the public and private debts of the United States alone, we continue to make obligations payable in gold, and continue to accept payment in paper money. All that is wrong with our paper money is that it represents the volume of business we do instead of the volume of actual wealth we produce. It is obvious that gold money can represent neither. Under present conditions, under any conditions that are likely to arise in the future, gold can not stabilize money. Our dollar is given its value by production, and it can therefore be stabilized only by making it represent production and nothing else—*and by stabilizing production.* This will be done by reorganizing industry according to the principles of economic efficiency and individual and social justice.

XVI

AGRICULTURE

THE farming industry of the United States is conducted chiefly by two classes: farm-owners, operating their own farms and doing a considerable part of their own work; and tenant farmers, cultivating land owned by others, on cash or share rental basis. Very little farming is done by corporations. There has been from time to time a great deal of talk about the possibilities of coöperative farming, but nothing of any importance has materialized. Agriculture is and probably will continue to be for an indefinite time in the future, our chief "individualistic" industry.

The individualistic method in agriculture is not likely to be supplanted, because it has proved its superior efficiency. When during the war it was feared that farm production might not be sufficient to feed our allies, our armies and our people at home, there was some talk on the part of corporation heads about reorganizing agriculture on the corporate basis for large-scale production. An experiment, financed by large corporate interests, was actually put into operation in Montana, on land leased from the government on very favorable terms. The fact that so little has been said about the results of this experiment may be taken as sufficient indication that it has not been markedly successful. It is to be expected that it will go the way of a thousand other adventures in stock growing, fruit growing, cotton growing and wheat growing that have heretofore been tried out and have failed. Where there has been an abundance of cheap land of virgin fertility, and cheap

labor, big agricultural adventures have sometimes attained a measure of success. Mammoth cattle companies flourished when there was an abundance of free range. But after the cream of the fertility of the land had been skimmed off, the big cotton plantations, the vast wheat fields and the orchards of thousands of acres in extent disappeared. After grazing the great free ranges of the West until, over vast areas, nearly all vegetation was destroyed, the big cattle and sheep ranches gave place to the despised "nesters," who, after years of heart-breaking toil and privation, were able to build up farms that would yield all the way from a bare subsistence to a substantial profit. The settlers are restoring the ranges, by pasturing fewer animals and depending only in part on the open range, but chiefly on their own pastures and forage crops.

Thus the individual farmer and home-builder has moved in where the great farming and stock-growing corporations have ventured and failed. Fortunate it is for our civilization that it is so. Agriculture is the nation's basic industry.

If agriculture should be suspended for a single year all other industry would collapse. If this basic industry were so organized and conducted that those engaged in it could curtail production in order to adjust to every contraction of the market, as is habitually done by corporate industry, death from want and starvation would take a toll from human life greater even than that taken by the world war.

So it is well that "modern methods of business" can not be applied to agriculture. It is well for the nation and it is well for business itself. Our industrial and business system could not have survived until now, if agriculture had not been based on a more enduring foundation than that which supports the great industrial and financial corporations. If profit had been the sole motive in

agriculture, as it is in corporate industry, we should all have starved years ago.

Soil fertility would have been exploited, as forest, mines and fisheries have been exploited. Instead of a rural population of free home-owners, we should have had wage slaves, or a peasantry similar to that which exists in many countries of the Old World, which is only once removed from feudal serfdom; or we should have had Mexican peonage, or a rural population of Chinese and Japanese coolies. Both the human and the material elements of the industry would have been converted into bank accounts and investments.

Agriculture is based upon the deepest-rooted and the most enduring instincts of man. The love of home and fireside; the sacredness of family ties; the love of the land; the inexpressible joy that comes from the annual awakening of living things; the creative instinct, ever renewed as successive crops are sown, tended and garnered; the normal, healthful, invigorating and uplifting life in the open—these are the potent forces that have held men and women to the land. These forces would long since have been seriously weakened or destroyed if corporations had operated the farms, directly and solely for profit, as they have operated other industries.

But though we have escaped this menace, there is another that is only a degree less dangerous. Though it has been impossible directly to capitalize the natural and human elements of agriculture into profits, it has largely been accomplished by indirect means. Corporation profits in huge amounts are invested in agricultural land. The great banking corporations largely control farm credit, and have been able to absorb in interest charges a large part of the earnings of the farmers. For a half century the railroads dominated agriculture by their control of freight

charges. By combining with elevator companies, warehouse companies, packing companies, milling companies and other corporations handling or manufacturing farm products, they were in a fair way to absorb the total product of the farms, except barely enough to keep the farmers on their jobs. Sometimes however, they overreached themselves, and did not leave the farmers enough to feed themselves, and their animals from one season to another, and have seed left for planting; so that the farmers were bankrupted and the sources of revenue for the corporations destroyed. Nor are the farmers yet freed from the grip of these monopolies. Though freight rates are now regulated by the federal government and by the States, and though railroad companies may no longer legally combine with owners of marketing facilities for the fixing of rates or services, they still are able to find numerous ways in which to favor the handlers of farm products as against the producers; and the entire transportation system has become so inefficient that freight charges, where not actually prohibitive, are eating up the earnings of the farmer, and imposing unbearable charges upon the consumers of farm products.

Over-charges to consumers of farm products come back upon the farmer in two ways: first, in the restriction of his market; and, second, in higher prices for manufactured articles and other products that he consumes. As the farmer is doing business on an individual and competitive basis, while those who handle and transport his products and furnish him with supplies are doing business on a monoply basis, he is powerless to protect himself. The prices that consumers pay for farm products are largely made up of two items—freight charges and marketing charges. These are always disproportionately large, as compared with the portion that is left to the farmer. But since the war there has developed a condition without

precedent in the history of American agriculture. At times there have been thousands of tons of farm products that could not be moved at all, because freight charges were greater than the prices for which the products could be sold. Hay rotted in the stacks in Montana and Idaho, while "feeders" starved where they had been concentrated near the markets at Omaha and Kansas City, and consumers were paying ruinous prices for meats. A mass of evidence has been gathered showing the tremendous spread between farmers' and consumers' prices. For more than a year after the price of wheat had fallen to an average of a dollar a bushel, bread continued to sell at fifteen cents for a one pound loaf. A barrel of flour, made from about four and a half bushels of wheat, would make 300 loaves of bread, so that the farmer received for the wheat that made forty-five dollars' worth of bread less than five dollars. The food products taken out in milling more than paid the cost of milling. The bakery cost, exclusive of the price of flour, was not over two cents a loaf; and the margin allowed the retailer was one cent a loaf. So that it cost only nine dollars to make the flour and to bake and sell the bread for which the consumer paid forty-five dollars. Deducting the five dollars paid to the farmer for wheat, there remained thirty one dollars that was absorbed in transportation and dealers' charges between the farm and the consumer.

There are other examples still more startling. When men's heavy cowhide shoes were selling at from nine to ten dollars a pair, prime salted hides were a drug on the market at sixteen cents a pound. Thus it would take the price of a sixty-pound hide to buy a pair of shoes. But the farmer had to pay freight to the dealer's warehouse, which often amounted to more than he got for his hide. As one farmer

said, "You can't buy a pair of shoes with a whole car-load of hides."

When corn was selling on Iowa farms for forty cents a bushel, corn meal was still selling in retail grocery stores for eight cents a pound; that is, at the rate of four dollars and eighty cents a bushel. When oats could hardly be sold in North Dakota and Minnesota for fifteen cents a bushel, the consumer was paying ten cents a pound for oatmeal, or at the rate of three dollars and twenty cents a bushel. Oregon or Idaho apples that netted the grower sixty cents a box, sold a few months later for five cents apiece, even in near-by cities. Potatoes that were loaded on the cars in Minnesota for sixty cents a bushel, cost the consumer a dollar and a half a bushel, or three cents a pound if bought in smaller quantities.

These illustrations might be multiplied indefinitely; but that is no longer necessary. The main facts of the situation are now universally admitted; it is agreed that the condition of the farming industry is the worst in our history; and that if it is not in some way remedied, it will be impossible to restore other industry to a condition of permanent prosperity.

There is disagreement as to the causes of the distress of the farmers. Many of the farmers themselves believe it is due to credit deflation, deliberately planned by financial interests to bring farm prices down. Others ascribe it to a lack of foreign markets. Some fix the burden of the blame upon the marketing system—where doubtless a great deal of it belongs—while others have allowed themselves to be persuaded that it is largely due to the demanding of high wages for inefficient services by the workers in other industries.

The most ridiculous and the most unfair explanation of

the plight of the farmers is that it is due to their own laziness and inefficiency. It used to be the fashion for financiers, business men and editors to ascribe all the ills of the farmer to his laziness, thriftlessness, lack of business ability or crankiness. And many still persist in this attitude, though it is evident that the farmers are being bankrupted by the hundreds of thousands, because they have produced more than business can get over to the consumer. "The farmers will soon be all right, if they will get down to work and spend less time riding around in automobiles," said the head of an Eastern business service, in the summer of 1921. This "business expert" had just returned from a two months trip through the great grain-growing sections of the Middlewest and Northwest. Two months in which to analyze what is admitted to be the most perplexing agricultural situation that has ever confronted the nation! Two months in which to observe conditions over a country including half a billion acres of farms; in which there is the greatest diversity of methods of production, transportation and marketing!

When it is shown that the farmers have produced all the nation has needed and more, and that they still are not prosperous, their critics fall back upon their old charges of lack of business ability. But the fact of overproduction is in itself proof that the farmers have business ability enough to run their farms successfully. Any business man who has tried it will testify that it requires no mean business ability to run a farm successfully.

Is it meant that the farmers have not been able to market their crops advantageously? The farmers have never had control of marketing machinery. Every attempt on their part to secure legislation for their protection in marketing their own products has been relentlessly fought by financial and business interests. Every attempt to

establish coöperative marketing has met the combined opposition of the most powerful business and financial interests in the country. Attempts of the farmers to get out from under the crushing load of debt that is grinding down agriculture, by establishing a credit system that will give them efficient and equitable service meets with like opposition.

Business men and bankers have lately had much to say to the effect that the farmer is compensated for low prices by being sure of a living for himself and his family. This also is "old stuff." It used to be thought that farming was the safest of all industries. The truth is that it is among the most hazardous, for the growing of farm crops depends upon conditions largely outside of human control.

But all the losses due to natural causes taken together will not amount to a tithe of the losses the farmers suffer from the inefficiency or profiteering of related business. Our industry is so organized that many interests remote from the farm have a claim upon what the farmers produce that takes precedence of his own claim. As a rule, bankers, railroad magnates, those who control and operate packing houses, elevators, mills and warehouses, as well as those who control the factories that make and sell supplies to the farmers are much surer of having enough farm products to supply their needs than are the farmers themselves. The fiction that farmers always have all the milk, butter, eggs, fruit, fresh meat and other farm products they want to eat seems to be very soothing to the consciences of those who in one way or another manage to get most of the farmer's earnings. This fiction sounds very plausible. It seems very natural to suppose that the farmer would not go hungry, or allow his wife and children to go hungry, with an abundance of food ready to be eaten. But truth is proverbially stranger than fiction. Farm

families have been found subsisting upon less than 15 cents per capita per day. Relatively, the farmer may starve in the midst of plenty, for the same reason that a shoemaker's children may go unshod, or a tailor's children poorly clothed. In each case there is some one else who has first claim upon what the farmer, the shoemaker or the tailor produces. Either the efficiency of the person in question is not sufficient to supply his needs, or some one else is taking a part of the products of his labor. "Overproduction" proves that the distress of the farmer is not due to lack of efficiency.

Farm products, like any other products, are most plentiful where the surplus accumulates; and, so long as they can be sold at all, the surplus of farm products does not accumulate on the farm; nor does the farmer retain any considerable part of it. It seems to be assumed that, when farm prices are low, the farmer will be able to use more farm products to supply his own wants. This is economic nonsense. If a farmer raises a thousand bushels of wheat at a cost of a dollar a bushel, and can sell it for two dollars a bushel, he can cover cost by selling five hundred bushels, and if he desires, he may retain the other five hundred bushels for his own use. But if he can get only one dollar a bushel, it is plain that he will have none left for his own use.

If the farmers are at all at fault for the disaster that has overtaken agriculture, it is because they have had too much confidence in the professions of ability and square dealing made by financial and business interests. The farmers have been told by bankers and business advisors every spring for the last five years that the outlook was for a market that would absorb all that they could produce. The farmers knew that it would take all that they could produce adequately to feed the people of this country alone,

to say nothing of the demands of other countries. They depended upon business and finance to get the products over to those who needed them. What was the result? The losses of the farmers from "overproduction"—the producing of more than business could handle, but not more than consumers needed—amounted to more than $30,000,000,000 in less than three years. Losses to workers and employers in other industries, largely caused by the slump in farm prices, will be not less than $30,000,000,000 a year, making the enormous total of $90,000,000,000 in less than three years. It is hardly likely that business will recover soon enough to avoid a third year of loss equal to that of the past two years. If it does not, the aggregate loss will be over $125,000,000,000.

By no possibility could the farmers have avoided these losses, except by cutting down production. Business advice was against restricting production; it would have been a difficult policy for the farmers to carry out; such a policy would have been against the inclination and traditions of the farmers; it would have worked great injury to other industries, which would have reacted upon the farmers. The only way in which losses could have been wholly avoided was to provide marketing, transportation and credit services adequate to the productive ability of the farmers and the needs of the people for farm products.

These are business functions. They are functions that have been assumed and largely monopolized by powerful interlocked industrial and financial corporations. Though these corporations have been created by the people in order that they may have the transportation, marketing and credit services necessary for the successful carrying on of their industries, they are not responsible to the people for the efficient discharge of their functions. They can not be made responsible by regulatory or punitive legislation. So

long as these corporations retain their present form of organization, and so long as their policies are dictated by existing motives, they will impose on the people the highest possible charges for the poorest possible services. The people are entitled to the best possible service at the lowest possible cost. That is the reason and the only reason for creating corporations and granting them powers and privileges.

These services are in their nature coöperative. They are not only coöperative in themselves, but they are basic services, necessary to the successful carrying on of all other industry. Industrial coöperation on the scale we are attempting is impossible without them, and can succeed only in the proportion that they are perfected and extended. We must have in these services not only the highest possible efficiency at the lowest possible cost, but we must have exact equity in their operation. All industries and interest concerned must have equal service on equal terms.

These things cannot be accomplished by existing corporations as they are now organized, controlled and managed. They are neither organized nor controlled in accordance with economic principles. Primary economic interests are not considered, nor are primary economic functions properly balanced. What is necessary, therefore, to bring relief to agriculture is the same thing that is necessary to bring relief to wage-earners, to "independent" business, to other primary producers, to consumers, and even to corporate interests themselves: it is that coöperative industry be organized and conducted primarily for service and not primarily for profit. This can not be accomplished by any amount of bargaining between farmers and corporate interests, nor by any number of concessions from business and financial interests to the farmers. Bankers repeatedly assert their willingness to "take care" of the farmers. Like

willingness is expressed by elevator, milling, packing and warehouse corporations, by manufacture of and dealers in farm implements and machinery and by every other organization dependent for its profits upon the industry of the farmers. But it is only natural that if there is any conflict, every one of these should place its own interest before that of the farmers. The farmer does not want concessions; he wants what rightly belongs to him. He does not want to be "taken care of," by bankers, middlemen or anyone else; with a square deal, he will be amply able to take care of himself.

Permanent relief to agriculture can not come from government ownership of transportation, marketing or credit facilities, unless they be organized and operated on a basis of economic efficiency. It cannot come from farmers' cooperatives, unless they are likewise organized and operated. Economic efficiency and industrial justice are governed by the same principles. Therefore, the organization that will give us the one will also give us the other.

In the United States industrial policy and organization have been largely supplied by industrial and financial promoters, who may or may not be possessed of money capital, of managing ability, or of skill in the work of production. It is this interest that has acquired the chief control of American industry, and that by its maladministration and exploitation has brought it so near to the brink of ruin.

This economic function is described by economists by the term "entrepreneur," meaning one who initiates and undertakes an industrial enterprise. It is clear that this function is as important as any other of the functions in industry. The interest of the entrepreneur is entitled to equal protection with every other interest in production. It is entitled to an equitable reward for services rendered and to a proportionate share in the control of industry. But it is

not entitled to dominate all other interests in industry, not to take to itself the profits of industry, in excess of the value of its contribution to production.

The owner of money capital is an investor in industry. He has an interest in the surplus of production over what is paid in wages, salaries and other costs. Where the investor of money capital is not also a working producer, he will be concerned that such surplus shall be as large as possible, and, under the present system of industrial control, is apt to assume that it will be increased by keeping wages and salaries down and by keeping consumers' prices up. His is the investment interest, as distinguished from the interests corresponding to the active factors in production. As a result of the accumulation of corporation profits, the investment interest has come largely to overshadow the producing interests. The function of the enterpreneur has fallen largely into the hands of bankers. It used to be exercised by men who thought in terms of industrial accomplishments—of economic production. It is now exercised chiefly by men who think in terms of interest and profits. In consequence, both the producing and the consuming interests suffer. Producing interests do not correspond to the several economic functions in production. There is no responsibility for efficiency. Industry is thrown out of balance, both as between production and consumption, and as between the several functions in production; and it is impossible for the economic wants of the community to be supplied. As the evil effects of such control develop, it will be impossible to pay investment charges.

Let us see how the farmers' interests are affected under this control—what are the chief economic ills from which agriculture is suffering. Without discussing the important question of tariff discrimination, they are:

1. Land monopoly;

2. An inadequate and costly transportation service;

3. An equally inadequate and costly marketing service; and,

4. A credit monopoly that takes from the farmer about all that remains after transportation and marketing charges and the exactions of landlords have been paid.

We shall consider these in inverse order, taking, first: Farm Credit. Credit is based on belief in ability to deliver things of value. Anyone who has an enforceable claim upon production can deliver things of value. Anyone who produces for the general store of things of value has an economic claim upon such general store, proportionate to his contribution to it. But this claim will not be enforceable, unless the rewards of industry are proportionate to services rendered in production. The value that one contributes to production is the measure of his economic credit. The enforceable claim that one has upon production or upon goods or services, is the measure of his financial credit.

Economic credit and financial credit ought to be equal. They are not equal under the present system. Financial credit should represent production plus appreciation, less consumption plus depreciation. If in any year farm products are increased 20 per cent., with no increase in costs; if the demand for farm products remains the same; and if there is no increase in other production, the farmers have an economic claim upon all production 20 per cent. greater than before. There should be a corresponding increase in the available financial credit of the farmers. Instead of this being true under present conditions, the farmer's financial credit decreases as his production increases. As the Secretary of Agriculture and the President of the

United States recently said, the more the farmers produce the less they get for it. Instead of being rewarded in proportion to their efficiency, they are penalized in proportion to their efficiency. The farmers increased production in 1920 and 1921. They decreased economic costs during these years. Other industries decreased production and on the whole increased costs. Instead of increasing in like ratio, the financial credit of the farmers continually dwindled; because the economic value of what the farmers produced was largely absorbed in rent, interest, marketing and transportation charges; because the farmers' productive ability was capitalized into corporation profits, to be made the basis of more profits; and because by this same process the buying power of most consumers of farm products was impaired, thus further reducing farm prices and cutting into the farmers' economic credit.

Financial credit follows profit: economic credit follows production. Financial credit goes to him who acquires first claim upon ability to produce and deliver things of value, no matter how that claim is acquired. The farmers have the ability to produce; they have economic credit. But they have not a corresponding financial credit, because control of the greater part of what they produce passes out of their hands.

The first thing, therefore, that is necessary to improve the farmer's credit position is to make his receipts equal his economic earnings. More favorable banking facilities or better provisions for long-time loans will help only in so far as it conduces to this result. If the farmers had had more liberal bank credit in the summer and fall of 1921, it might have enabled them to avoid a part of their losses on that particular crop. It might have delayed for a year or two the general disaster that followed the deflation of farm prices. If the farmers had been able to increase their

long time loans during the period between 1910 and 1920 ten billion dollars instead of the four or five billions that they did increase them, they might have been able for a time to hold farm prices a little nearer the level of the prices of corporation products and services; but monopoly profits would have been pyramided upon the higher farm prices, the limit of the buying power of consumers would have been sooner reached, and the farmers would have "taken their losses" earlier than they did, and they would have been left with a mortgage debt of twelve or fifteen billions, instead of their present debt of eight billions.

Farm Markets. Costly and inefficient marketing injures the farmer in many ways. It keeps farm prices down. It increases prices to the consumer of farm products, narrowing the farmer's market; it increases costs in industries supplying the farmer with materials and supplies, thus increasing his production costs; it demoralizes the market so that his products waste on the farm or in transit; or it fails to develop markets for the several kinds of farm products, so as to absorb all that the farmer can produce. In all these ways, the farmer's economic credit is impaired by inefficient marketing. The farmer is interested in marketing both as producer and as consumer, because, in the long run, his purchases coming through the markets will equal his sales. He is interested in having his own products go over to consumers at the lowest possible cost, because his market depends upon their ability to buy. He is interested in having the highest efficiency in all industry, because both his selling prices will be higher and his buying prices lower in proportion as costs are reduced in other industries. And efficiency in other industries depends upon the distribution of economic functions and the distribution of economic rewards in exact proportion to the value of services rendered.

The costliness and inefficiency of marketing are due to

the fact that profits are taken in excess of the value of services rendered, and without relation to such services. This is due to the fact that marketing is controlled by corporation monopolies that are not responsible for efficiency. Marketing activities are for the most part necessarily coöperative. Successful coöperative industry requires that those who respectively supply policy, organization, management and labor shall participate in control and shall share in the common product in proportion to the value of their several services. It requires, furthermore, that these several interests be held responsible for efficiency on the same basis. But under the present system even he who devises the plan under which a marketing service is operated often has little authority in carrying it out. Those actually engaged in management can not be held responsible to the public for their efficiency; and labor can not be held responsible for labor efficiency, because it has no voice in the determination of the conditions under which it works. In no case is there a proper economic incentive to efficiency. Organizing ability, managing and directing ability, and skilled and unskilled labor are acquired at the lowest salary or wage that will secure their services. The more highly specialized ability is often at a greater disadvantage than unskilled labor, because it can less easily change from one industry to another. In no industry is there a greater need for specialized ability of a high order than in that of marketing; and in none are the inducements to such ability more inadequate. This applies especially to organization and management. There is too little of the technical knowledge of the engineer, and the economic training of the business expert, and too much of the promoter, the speculator and the financial dictator.

What is wanted in marketing is economic coöperation—an organization in which the several productive organs in

the industrial organism can discharge their proper functions. Such an organization is outlined in Chapter XIV. In the marketing organizations there proposed, control is distributed in exact ratio to the importance of the several contributing factors; all interests are equally protected; responsibility can be fixed upon those who are able to produce efficiency; incentive is rightly placed; and profits are equitably distributed. The farmer will share in the control of a marketing corporation on the basis of his contribution as measured in the value of the products he markets through such corporation. If he contributes capital, he will share on the same basis as any other contributor of capital. If he contributes labor or management, he will be paid wages or salary on the same basis as any other official or employee, and will have a like vote in the determination of control. Where producers and consumers coöperate through a single organization, the purchaser of products sold by any such corporation will share in control, on the same basis, in proportion to his contribution of business to the enterprise. The producer, a consumer, organizer, manager, engineer or other expert, and skilled or unskilled laborer—each will share in surplus according to the value of his contribution to the industry and according to his relative economic interest in it.

By such means all the evils of the existing marketing system will be removed. There will be all the efficiency that the economic community can develop. Profits will be equitably, and therefore widely distributed, thus protecting the buying power of the consumer and the market of the producer. A balance between production and consumption will be established and prices will be stabilized, both to producers and to consumers. The recurrence of disastrous periods of inflation and deflation will be prevented. There will be no disastrous slumps in farm prices; and the eco-

nomic credit of the farmer will be absolutely protected.

Transportation. The Railroads and the Farmers. As we have elsewhere shown, railroad monopoly was the first great exploiter of agriculture in this country. It was to American agriculture what landlordism was to English agriculture. We had a railroad monopoly instead of a land monopoly in this country because for a long time land was so plentiful that no monopoly over it could be maintained; because the value of land depended upon access to markets; and because the railroads were almost the only connecting links between the farms and the distant centres of industrial and commercial population, where a market for farm products must be sought. We have shown in Chapter XII that the prosperity of the American farmer is absolutely dependent upon transportation facilities, and that transportation in this country is and must continue to be chiefly rail transportation. High freight charges and inefficient services are largely responsible for the wide spread between farmers' and consumers' prices. Inadequate railroad facilities are largely responsible for the lack of full development of markets for farm products, and equally responsible for the holding back of the development of some of the richest farming sections of the country. We have shown that it is impossible for the railroads to provide adequate services at reasonable cost under their present control and operation; and we have outlined a plan which will assure the highest possible efficiency at the lowest possible cost, at the same time that it will give equal protection to all just interests involved; that is, the plan of public ownership and democratic operation.

Land Monopoly and the Farmer. Though nearly 40 per cent. of all the farms in the United States are operated by tenants, land monopoly is not the chief evil from which our agricultural industry is suffering. In fact, owing to the

inefficiency and costliness of transportation, marketing and credit services, the rent value of agricultural land has, in many sections, practically disappeared. Moreover, the interest burden upon the owning farmer is often greater than the rent burden upon the tenant. But land monopoly is a growing evil and an increasing menace to agricultural prosperity. Even though returns are small, as compared with returns from other sources, land investments will continue to be sought because of their permanence and safety. With the ever-increasing burden of farm mortgages, there will be a constant increase in the number of foreclosures. So that, without any intent on the part of anyone to establish land monopoly, ownership will pass out of the hands of the farmers. Absentee landlordism will increase, as ownership concentrates more and more with financial interests at the commercial centres; so that we are headed for a system of land tenantry that may be even worse than that under which England has so long suffered, because our landlords will have no immediate interest in the welfare of their tenants.

There is no way in which, under the present system of industrial control, this tendency can be checked. What is left to the farmers after interest, freight and marketing charges have been paid, will be progressively and automatically capitalized into land values. Profits amassed by the corporations controlling transportation, marketing and credit will be largely invested in land. So that the efficiency of the farmer will serve only to perpetuate that profit system and to fasten the burden under which he is now staggering upon the backs of his children and his children's children for generations to come.

Land monopoly can be checked, and in the end abolished by reorganizing corporate industry on a democratic basis. In the first place, the democratization of transportation,

marketing and banking will prevent the accumulation of monopoly profits. Profits in these industries will be distributed back to producers—including the farmers—and onward to consumers—also including the farmers—in proportion to the value of services and amount of economic interest. So that what surplus there is to invest in land will be left largely in the hands of the farmer. He will not have to borrow his own credit; he can retain his land if he has it, or buy if he is in need of more land. Nor can the farmer himself make an excessive charge to the consumer on account of land valuation. If he boosts his land value, a half of the increase will go to the consumer because of the division of profits in marketing and transportation industries. The other half will be shared with those who invest labor or capital in those industries. A part of the share that goes over to consumers will come back to the farmers, because they also are consumers. Therefore, any increase in land values will be economically and equitably distributed, as in the case of corporation profits. Thus will be removed once for all the most dangerous menace to agricultural industry.

But this result will not be achieved until practically all corporate industry, and especially that most closely related to agriculture, is democratized. Tenant farmers require immediate relief. They can get relief by organizing tenant-farmer corporations on essentially the same plan as that offered for other coöperative industries. Such corporations would be made up of farmers, landowners and farm laborers. Capital stock would be issued to landowners, equivalent to the value in money of their land. Labor stock would be issued to the farmer who represents management, and also to those employed to work on the land. The farmer and the farm hand would each have a vote in the control of the corporation proportionate to the salary

or wage he received. If the par value of the capital stock were one thousand dollars and the rate of dividend five per cent., a laborer whose wages were a thousand dollars a year would have a voice in control equal to that of the land-owner contributing land valued at twenty-thousand dollars. If the farmer's salary were placed at three thousand dollars a year, he would have three votes in control, to one each for the landlord and the farm hand. If the farmer and the members of his family did all the work on the farm, they would, of course, hold all the labor stock, and would share in control accordingly. Equipment or supplies furnished by the landowner or the farmer would constitute capital investment, carrying voting privileges on the same basis as land investment. Bond investment, carrying no voting privileges, and no participation in surplus might be provided, if found desirable, as in the case of other corporations.

Wages and salaries would constitute a first lien upon gross revenues, and capital investment a first lien upon net revenues. Land and other capital investment would have exclusive title to all the property contributed, and to all other property subsequently acquired by the corporation, as security for the investment. Land investment could be secured by title to the land, and the investment of any other kind of property by title only to such property, if deemed desirable for the protection of the landowner. This might be necessary where there were legal, sentimental or other reasons for retaining ownership.

Surplus would be distributed, one-half as public, and one-half as corporate surplus. Corporate surplus, if distributed, would be divided among all the contributors of labor, land and other capital, on the basis of the value of their respective contributions—the farmer or the farm hand receiving for each thousand dollars of salary or wages as

much as the investor of land or other capital whose preferred dividend is one thousand dollars.

Under this plan, the landlord will share in the returns from his land on the basis of all that it is worth at the time he invests it in the producing corporation. And the farmer or the laborer will likewise share in returns on the basis of the market value of his services. But if, through increased efficiency of labor or management on the land itself, through the improvement of transportation, marketing or credit services, through the expansion of markets or through the general development of industry, earnings from the land are increased, the increment will not be added to the investment of the landowner. It is so far as he is concerned, an unearned increment. But for the cooperative industry in which he invests his land it is an earned increment, in so far as earnings are increased by efficiency in control, management or labor. The landowner shares in the earnings of the corporation—and therefore in the increment of land value—in proportion to the value of his contribution to efficiency. The remainder of the increment goes to the farmer, the laborer and the consumer, the latter sharing on account of the contribution of the economic community as a whole to the increase in the use value of the land. The increment in land value is and always has been an earned increment. The trouble is that the increment has not gone to those who earn it. Under the proposed plan it will be distributed among those who earn it in exact ratio to the value of their several services in its creation.

Thus industrial democracy offers a solution for the problems that are vexing the American farmer. It will protect his credit, secure his markets, supply him at cost with efficient transportation and free him from the incubus of land

monopoly. It will assure permanent agricultural prosperity; and in so doing will remove the most dangerous menace that threatens the prosperity and happiness of the American people.

XVII

INDUSTRIAL CONFLICT

We have shown elsewhere in this book that all modern industry is coöperative. Wherever men live together in any relation industry is and must be coöperative. We are dependent upon each other whether we want to be or not. We must contribute to each other's support; we must exchange services; and we must devise some method of measuring the relative value of the services exchanged, and of distributing the joint product of industry in accordance therewith. If we are to have industrial prosperity, we must find some peaceful, just and effective way of adjusting industrial relations.

Yet though industry is necessarily coöperative, and though industrial prosperity necessarily depends upon the peaceful adjustment of economic relations, there is world-wide industrial strife. It is economic and industrial conflict that prevents the restoration of peace in Europe, and it is economic and industrial conflict that, since the war, has prevented in this country the realization of an industrial prosperity greater than has ever been known in the history of mankind. We have all the natural resources and the human qualities that go to the making of a happy and prosperous nation. We proved during the war that we were able to produce enough wealth to banish poverty and want from the homes of all the people forever. Yet we are now painfully dragging ourselves out of the worst period of industrial stagnation in our national history. We have inflicted upon agriculture a loss amounting to billions of dol-

lars, which is finally reflected in run-down farmsteads, in depleted soil fertility, in discouragement and defeated ambitions, and in the migration of the best elements of the rural population away from the farms. We have had millions of unemployed workers and thousands of idle plants. We have seen thousands of the young men who so recently offered their lives in defense of the principles of democracy tramping our streets and highways, begging for a chance to earn enough to pay for the next meal and a place to sleep.

All this is because we could not bring together our surplus labor and material capital for effective production; because, under industrial conditions necessitating coöperation, we persisted in making of industry a battleground upon which rival industrial powers, blinded by prejudice to the essential oneness of their interests, fought out their personal or class quarrels.

There have been one or more strikes in every important industry since the war, each involving heavy losses to the strikers themselves, to their employers, and most of all to the people at large. There was actual war and bloodshed in the coal district of West Virginia. Industrial conflict, carried on by the most ruthless methods by both contestants, has nearly destroyed the building industry in some of our largest cities.

Industrial warfare will go on, becoming ever more relentless, cruel and destructive, until we learn that industry is necessarily coöperative; that coöperation and conflict are irreconcilable; that the only method by which coöperation can be made effective is that of democracy; and that democracy means peace.

In considering the causes and inevitable results of industrial warfare, it is of little moment which side is in the right and which side is in the wrong in any particular con-

flict. It is profitless to quarrel over the question of who is more to blame. It is the system that is vicious, and all of us are caught in its iron grip. We can not free ourselves by destroying the labor unions, for that would leave us at the mercy of those who are now fighting the labor unions. We can hope for no permanent peace and prosperity from the triumph of organized labor unless it adopts the policy of constructive coöperation in accordance with the principles of social justice and economic efficiency. If neither of the contestants wins over the other, industrial strife will be perpetual, and industrial prosperity and national progress forever delayed and prevented. We must find a way to adjust our industrial relations by peaceful, economic coöperation, if our nation is to be saved from the fate that has overtaken every nation that in the past has failed so to adjust its industrial affairs.

The coöperation that alone can save us can not be achieved merely by bringing the parties to industrial conflict together now and then to talk over possible mutual concessions or temporary adjustments. It can not be brought about by the intercession of politicians, statesmen or government officials, however wise and well intentioned they may be. It can not be accomplished by setting up boards of arbitration or conciliation, nor by the creation of industrial courts with power to enforce decrees. It can not be secured by merely remedial, coercive or punitive legislation, nor will it be provided by financial or industrial magnates out of the goodness of their hearts or the wisdom of their judgment. It can not be worked out by any method of profit-sharing or participation of labor in management, so long as other interests remain in exclusive control and labor holds such concessions only at their pleasure. In fact, such concessions tend, on the whole, to make conditions worse instead of better, because they may give a false

sense of security to workers, and be used by employers to justify a further deprivation of the rights of labor. Neither social and individual justice nor industrial efficiency can come from the giving or receiving of concessions. The offering of a concession means that he who offers it is holding a power that does not belong to him. The acceptance of a concession means that he who accepts it yields a right that does belong to him. This method will serve for the adjustment of temporary situations, but even so it may be safely employed only if there is constant reference to fundamental principles. Otherwise, any adjustment, whether of industrial or other relations, must end in failure.

If we fail to find a common ground of peaceful industrial coöperation, we may not expect that, within the near future, "capital" will be able to bring labor to its knees, nor that organized labor will be able greatly to strengthen its position against "capital." Nor is it likely that they will be able to reconcile their differences. What is to be expected is an indefinite continuance of strife, with no marked advantage either way, demoralizing alike to both labor and "capital," and destructive of industrial welfare. The open-shop drive of employers, though apparently successful in many industries, was fore-doomed to failure. If it should succeed, the employers will find themselves in even a worse situation than they were before they destroyed organized labor. If the policy that has been adopted by industrial corporations in the past may be taken as any indication of what they would do in the future, with the labor organizations suppressed, they would soon so grind down their employees that conditions would be unbearable. There would be resistance by acts more lawless than any of which organized labor has been accused; and, as usual, such acts would be countered by other still more lawless acts on the part of corporate employers,

under cover of the law and claiming the sanction of Constitutional principles. There would be "out-law" strikes and sabotage, followed by still more outrageous and arrogant abuse of the law and Constitution "for the preservation of law and order and the protection of the rights of the public." All these unorganized efforts of labor would fail, misguided employers would complete the degradation of labor; and by that act they would destroy the highest labor efficiency that has ever been produced, and bring down into hopeless ruin the splendid industrial structure that has been built upon it.

The open-shop drive will not succeed. Organized labor will not be destroyed. But even so, the outlook is hardly more encouraging. So long as privileged corporations remain in control of industry, every gain made by labor will be grudgingly yielded and precariously held. To the limit of the consumers' ability to pay, every advance in wages, with an added profit, will be covered in the consumer's prices. So that every victory won by labor in a wage controversy is an empty victory. The very enforcement of a higher nominal wage results in a greater proportionate increase in the costs of living to the wage-earner—in a lower real wage. It is even worse than this. It results in the establishment of a fixed capital and labor charge upon the consumer that has no relation to production because neither capital nor labor is responsible for efficiency. Labor does not share in the control and management of industry, and therefore can not be held responsible; while "capital" always shifts responsibility for high prices to labor, on the ground that it has enforced higher wages.

Labor is fast learning this important truth; and, in learning it, is opening the way for the adoption of an enlightened labor policy that is by far the most hopeful development of recent years. During the recent coal strike

in England, one of the most insistent demands of the miners was that operators should not be allowed to make increases in wages the basis of higher prices to consumers. In the presentation of their case to the public, the coal-miners of the United States lay an even greater stress upon efficiency, elimination of waste, conservation of coal resources and fair treatment to consumers—the interests of the public—than upon wages and working conditions. The plan of the railroad workers for the reorganization of the railroads is calculated to protect the rights and to promote the welfare of the public, equally with the rights and welfare of the workers themselves. Organized labor is getting well away from the economically unsound idea that labor interests can be served by cutting down production. Labor has come to realize that its own wants can not be fully supplied except by honest and efficient service; and it has also come to understand that, with efficient organization and management and efficient labor, all the reasonable needs of all the people can be supplied; and labor is learning, moreover, that it must assume its full share of the responsibility for efficiency.

This enlightened and advanced position of labor is the more significant because labor has never held power equal to that held by the interests opposing it. Labor entered the modern industrial conflict handicapped by traditions that were the product of ages of industrial depression. It has fought its way up from the personal slavery against interests always hedged about by accepted conventions, social respectability and the forms of law. The powers that have held labor in bondage have developed and preserved the traditions, conventions and social customs and have made the laws that justified that oppression. Labor has opposed to the claims of special privilege the equal and inalienable rights that belong equally to all human beings,

regardless of wealth, class or other distinction. It is in the nature of things that labor should take this position. It is inevitable that those who are oppressed should appeal to the fundamental principles of right and justice, and that their oppressors should find their justification in conventional morality, social respectability, and self-controlled and administered law. In this sense, labor is necessarily and unavoidably radical, and special economic and industrial privilege is just as necessarily conservative and reactionary. Every one who enjoys any special privilege is by training and self-interest conservative, and everyone who is denied any of his rights, upon becoming conscious of his deprivation, will be radical, progressive or revolutionary. It is so, not only with regard to industrial affairs, but with regard to all human interests. Those who have the present power will find a conventional and quasi-moral justification to hold it, and those who have not the power will appeal to principles of fundamental morality. Labor has won only when it has recognized, demanded and fought for those fundamental rights that are inherent in all human beings. It may have won temporary advantages by setting up its own special privileges, and fighting for them regardless of the rights of others, but it has won no enduring victories by that method. The holding of any permanent special privilege by labor as a whole or any part of labor is unthinkable. A labor aristocracy is a logical and practical impossibility.

So long as in our industrial system any man or class of men holds any position of honor, profit or power that does not justly belong to them, there can be no free coöperation. If there is no free coöperation, there can be no industrial prosperity; we can not secure the highest degree of industrial efficiency. To secure the highest industrial efficiency, we must have the best that is in every in-

dividual or interest that contributes to industry. Men can not give their best, and will not give their best, if they are working under compulsion or arbitrary restraint; and since individuals work primarily for the sustenance of their own lives, they will not give their best unless they are assured of the just reward for the work they do, which, in coöperative industry, is represented in the claim upon the products of coöperative industry, proportionate to the individual contribution to such industry. So that both industrial justice and industrial efficiency depend upon free coöperation.

Stated differently, free coöperation is economic coöperation. Under present conditions, we may be said to have industrial coöperation but not economic coöperation. We have individual coöperation in that all producers contribute to a common stock of products, out of which all draw according to what they receive for their services. We have industrial coöperation in that all consumers depend upon the efforts of all producers for the satisfaction of their economic wants, and in that all producers depend upon all consumers to create a market for their products. We have industrial coöperation in that all producers to a greater or lesser extent share in the control and management of industry. But we do not have economic coöperation unless all producers share in the products of industry in proportion to their several contributions to production, and participate in management and control on the basis of their several interests and abilities. We have not economic cooperation, unless the equal interests of producers and consumers are balanced, so that there will be an automatic adjustment between production and consumption.

We have shown that democracy requires the equal protection of individual and social interests. We now find that industrial efficiency requires exactly the same thing. The reorganization of industry on the basis of

democracy, according to the plan we have outlined, will provide for such equal protection of interests. It will give equal protection to the producing and consuming interests, and will thereby balance production and consumption, giving equal protection against the failure of consumers' credit and against the impairment of capital, and preventing unemployment. It will give equal protection to the several producing interests, labor, management and "capital"; by this means assuring the highest efficiency and providing for the equitable and economic distribution of products.

The achievement of industrial democracy will depend largely upon labor organizations and upon progressive movements among the farmers. These two industrial classes have practically identical interests. They are both shut out from any effective share in the control of industry or in the disposal of the wealth they produce. They make up the great majority of the population of the country. They do the greater part of the work of production, and they have the largest interest in consumption. The farmers have a right to have manufactured products and transportation and marketing services at the lowest possible cost, and industrial workers have a right to have the products of the farms at the lowest possible cost. Only an efficient organization of corporate industry can give to the farmers the service that will enable them to supply the food and the raw materials needed by the workers in other industries; and efficient organization is democratic organization. Workers in other industries consume the greater part of farm products; and farmers are the largest consumers of what is produced in other industries. Each class is therefore concerned to have the buying power of the other maintained at the highest possible level. It is to the interest of both that the machinery of exchange and

distribution between the farm and the factory work with the highest efficiency and that all unnecessary costs be eliminated from these activities. It is to the interest of farmers and industrial workers that industrial warfare be eliminated and that their mutual relations be established on a basis of free, constructive and peaceful coöperation.

We have shown that industrial democracy will give equal protection to all industrial interests. It will protect the rights and promote the welfare of "capital" and management, equally with labor. But the capital interest has been and is a privileged interest. The same is largely true of management, because it is closely associated with the capital interest. We have shown that both the owners of capital and those who supply organizing and managerial ability are often exploited by financial entrepreneurs, and that industrial democracy alone can provide protection against such exploitation. We have shown that, through the accumalation of profits, the impairment of general buying power and the failure of markets, the privileged interests themselves are injured and the value of their vested wealth constantly menaced by the policy in which they persist; and that that injury and menace also will be removed by industrial democracy. That is, industrial democracy will save special privilege from the affects of its own mistaken policy.

Yet, because special privilege is special privilege, it is not to be expected that it will take the initiative in the establishment of industrial democracy. We can not expect that special privilege will be voluntarily given up. It will be useless to inveigh against the prejudice, the arrogance or the unreasonableness of special privilege. These are its natural attributes, that have grown up with it, and it could not rid itself of them even if it would. It is useless to fight special privilege by any method that is not firmly

grounded upon democracy. Labor may be compelled from time to time to strike in order to maintain its organization and to prevent the complete degradation of the worker. Farmers may find it necessary to contend for merely temporary and inadequate legislation in order to save their industry from immediate bankruptcy. But they can not remove special privilege by any such methods; and special privilege must be abolished before the rights of either the workers or the farmers are secured, and before we can have enduring industrial peace and prosperity.

This does not mean the arraying of class against class. It does not mean the stirring up of class hatred. It does not mean any violent attack upon special privilege, nor, necessarily, any attack of any kind upon special privilege. It means the organization of the wage-earners on the one hand and the farmers on the other, for the protection of their political and industrial rights and the promotion of their common interests. It means the devising of a plan of common action for the protection of their common rights on the part of both wage-earners and farmers. It means education, accompanied or followed by political action. Then the enactment of legislation providing for the organization of all coöperative industry on the democratic basis; and after that the work of actual reorganization by forming corporations in accordance with the plan proposed.

Industrial democracy will be achieved through political democracy. The people will secure their industrial rights by the exercise of their political rights. There will be no confiscation of property; no expropriation of capital; no violation of the political, social, or industrial rights of any man or class of men—there will be no revolution. There will be calm, orderly, well-considered and constructive coöperation on the part of those who realize the dangers that

threaten our industries and our civilization, and who have the vision to see the possibilities that lie in the application of those principles that we have tested out in our political life to the solution of our industrial problems.

XVIII

FOREIGN TRADE

THERE are many who believe that there can be no permanent recovery of industrial prosperity in the United States until foreign trade is restored. Our experience since the war, however, has shown that our domestic markets are of much greater importance to us than our foreign markets. Our exports of farm products, especially of wheat and other grains, increased during 1920, and were well sustained during the following year; but exports gave little support to farm prices. There was more than an average volume of many other exports but that did not serve to check our plunge into the abyss of industrial depression that swallowed up a hundred billion dollars in less than three years. Our main trouble did not lie in a lack of foreign demand for our products, but in a lack of domestic demand. And the lack of domestic demand was not because our people did not need the things produced, but because they were not able to buy them.

The importance given to export trade by great financial and business interests has always been something of a puzzle to those of us who are not versed in the mysteries of high finance. An increase in exports is always regarded as a national asset; an increase in domestic consumption is always viewed with alarm. Yet it is admitted that we must eventually import goods enough to balance our exports, and that what we import must finally be consumed.

Why should we always be so anxious to export a commodity, if there is need for it at home? Why should

we be so greatly concerned over the rehabilitation of Europe, the recovery of her buying power, when there is a potential buying power among our own people that if fully developed would absorb the greater part if not all of our surplus? During the market year 1920-21, we sent out nearly a hundred and thirty million bushels more wheat than we did the previous year; and our domestic production fell off almost an equal amount. "Business" was so elated over this great increase in exports that it gave little attention to the decrease in home consumption. When business did notice the fact that the American people had been living on short rations of bread stuffs—with a surplus accumulating that was bankrupting the farmers—it did not know whether to set it down on the credit or the debit side of our ledger. It would seem that our economic advisors would have us believe that it should go on the credit side; that the nation was ahead by the amount that its consumption fell off. If that is so, if we gained a hundred million bushels of wheat by refraining from eating it, would we have been ahead two hundred million bushels if the decrease in consumption had been twice as great? If the answer is in the affirmative, then by the same method of reasoning, we would be ahead if we refrained from consuming the goods we got in exchange for the wheat we exported. What would we do with such goods if we did not consume them? Export them? To what end, if we were not to import and consume an equivalent in other goods?

If we are to increase our production to the highest possible limit, and decrease our consumption to the lowest possible limit and export the difference, there could be but one result—that we would convert all our surplus wealth into money or into some form of demand upon the countries to which we export. That is exactly what we have been doing during the last seven years; and we have

been starving millions of our own people in the meantime. We exported over a hundred million bushels of wheat needed by our own people in 1920-21, and what did we get for it? European promises to pay. We already had nearly twenty billions of such promises that were uncollectible. But why collect? Even if Europe could return to us an equivalent in consumable goods, they would be of no use to us. According to our topsy-turvy economics, the less we consume the better. So why should we want Europe to pay us in goods?

We have the promises of European countries to pay for the goods we sold them, and we are now concerned that they shall pay on a gold basis. But why? What do we want with gold? What can we do with it? Buy goods to export again and get more gold? Or promises to pay in gold? Certainly not to buy goods for consumption, since we deprived ourselves in the first place in order to have as great a surplus as possible to export.

To common sense this is mere absurdity. But it is, after all, only a variation of the general proposition of modern business that we are to produce as much as possible and consume as little as possible, in order to make profits as large as possible. It is doubly absurd from the fact that in the end profits will disappear, unless there are final sales to the consumers; and the consumer will not buy what he is not going to consume.

The explanation for the over-emphasis of foreign markets is to be found in the profit motive. Business believes that foreign markets will protect its domestic profits. When foreign prices are high the price the foreigner will pay is made the measure of the price exacted from the home consumer. If foreign prices are low the excess over what the home market will absorb at a given price is sold in the foreign market. Thus the fact of a foreign market for

surplus makes possible the maintenance of monoply prices to home consumers. When so employed, therefore, a foreign market is a positive injury to home consumers.

How is it with the producer? Take the case of the farmer. Before the war it was always said that the price of wheat was fixed in Liverpool. This meant that those buying American wheat paid the farmer the Liverpool price for it, less freight and handling charges, less dealers' profits. If the Liverpool price was high, it was made the basis of prices to American consumers. If it was low, American consumers were charged all that the traffic would bear, which was always a price higher than the Liverpool price, though no ocean freight was paid on what was sold in this country. But if through "overproduction," under-consumption, slowness of transportation, defective marketing facilities, speculation or other causes, there occurred an accumulation of a surplus of wheat in this country, the price to the producer was determined by the relation between supply and demand where the surplus accumulated. High prices to American consumers curtail American consumption. (The extent of such curtailment was over a hundred million of bushels of wheat in 1920-21.) Ability to dispose of surplus on a foreign market enables dealers to maintain high prices to home consumers. An accumulation of surplus in this country occurs; and farm prices go down. When this occurs, the farmer does not get a price based on Liverpool, but a price based on a glutted market at home. The dealer gets the surplus at "over-supply" prices and pockets the difference.

This was strikingly illustrated in 1920–21. Export prices for wheat were high, and prices of bread and retail prices of flour to American consumers were higher. Domestic consumption was curtailed. Wheat piled up in the elevators in Minneapolis, Chicago and Kansas City, and

backed up in local elevators and on the farms. Wheat prices fell with a crash, though there was continued foreign buying and the potential domestic demand was never filled. The price of wheat was not fixed at Liverpool, but where the surplus accumulated—in Minneapolis, Chicago and Kansas City, and at the local elevators. Both the foreign and the domestic consumer paid on the basis of a shortage, and the farmer was paid on the basis of a surplus. It makes no difference whether the surplus is real or artificial—an economic or a trade surplus—the effect is the same.

But suppose that there had been no foreign market at all. In that case we should have adjusted our production of wheat to the domestic demand. This would have released land and energy for other production; and if there had been an excess of other production, we should have taken a rest until consumption caught up.

The benefits of foreign trade do not lie in the mere fact that we can dispose of our surplus products, because in the long run there is no surplus. If we do not sooner or later import goods to balance our exports, and if we do not eventually consume the imports, we shall be giving our surplus to the countries with whom we trade. Foreign trade is beneficial to the extent, and only to the extent that it enables us to exchange goods that we can produce for goods that we can not produce, or goods that we can more easily produce for goods we produce with relative difficulty. We can produce wheat but we can not produce coffee; therefore trade with a country that wants wheat and has coffee to exchange for it is beneficial to us. We grow cotton in abundance, and we can also spin and weave cotton fabrics; but England may be able to make certain cotton fabrics better or cheaper than we can; or it might be relatively more economical for us to grow cotton to exchange for

such fabrics, instead of making them ourselves. England wants cotton; we want those particular fabrics. We have a surplus of a commodity that England wants, and England has a surplus of a commodity that we want; that is the just and economic basis of trade between the two nations, and there is no other. Actual transactions in foreign trade are, usually, more complicated. We might, for example, sell agricultural machinery in Russia for money, and with the money buy manufactured cotton goods in England. We might sell flour to Japan or China, and with the proceeds buy coffee in Brazil; but in the end we must finally get back from some or all of the countries with which we trade an amount of goods equivalent in value to the goods we sell to them. There must be an advantage to us in selling to foreign countries, or we would not sell to them; there must be an equal advantage to them in buying of us, or they would not buy. Obviously, it is the same if we look at the other side of the transaction—if we are primarily concerned with buying from other countries. In either case, the buying and selling interests are mutual and of equal importance. One party to the transaction represents the producing and the other the consuming interests; and these, as was shown in Chapter IX must balance. From the point of view of social justice, they must receive equal protection; and from the point of view of economical efficiency, they must be equally facilitated and promoted.

Thus, the principles that govern foreign trade are exactly the principles that govern domestic trade, that govern all the economic and industrial relations among men. All those who exchange among themselves the products of their labor are members of one economic system, whether they are citizens of the same country, or citizens of different countries. The trouble with foreign trade is exactly the same as the trouble with domestic trade; and

that is that it is not organized, controlled and conducted on a basis of mutal advantage, but on a basis of special advantage. It is organized, controlled and conducted for profit, and on the assumption that what one nation gains, others must lose. The result is that adjustments are made on the assumption that conflict is unavoidable, and that the best than can be done in the interests of any nation is to protect the advantages it has gained, at the least possible loss or danger to itself; and that the best that can be done in the general international interest is to compromise conflicting claims so as to restore or to maintain a peace that is always precarious, because every nation will go on to secure for itself what further advantages may be within its reach. Under these conditions, a peace is never more than a truce; and a truce that must sooner or later be broken, because it is based on the continuation of conflict among the peoples of different nations in the carrying on of their most vital and necessary activities and in the adjustment of their most important relations.

What is lacking in foreign trade, as in domestic industry, is economic coöperation. Economic coöperation is free coöperation. Economic coöperation requires that there be an exact balancing of the consuming interests with the producing interests and that the several factors of the producing interests be so coördinated that the highest efficiency will be secured. Control must be shared by those contributing to efficiency and in proportion to the value of their several contributions. Owners of labor or money capital must be free to invest it in foreign trade or to withhold it from such investment. As all coöperators will freely enter any foreign enterprise, and as the enterprise will be conducted by agreement among them, each voting upon the basis of the value of his contribution, there will be free coöperation throughout. This is the first requisite

to efficiency. The second is a proper and rightly placed incentive. That is provided by the distribution of surplus in accordance with the value of services rendered; that is, in proportion to contributions to efficiency.

These requirements are fully met by the plan of industrial organization outlined in Chapter XI. It will be advisable, however, to show somewhat in detail how the plan will work out in foreign trade. The plan contemplates that all industry that is carried on under the corporate form shall be organized in accordance with the principles of industrial democracy that we have set forth. The bulk of foreign commerce is carried on by corporations. So that, if the general policy of industrial democracy were carried out, practically all foreign trade would be carried on in accordance with its principles. What would be the result? Corporations would be organized for the carrying on of general export or import business in different lines, as at present, but they would not be subjected to the manipulation of powerful, privileged financial interests, organized not for service but for profit. The foreign market could not be manipulated for the purpose of keeping up prices to American consumers or depressing the prices paid American producers, as is done at present. This could not be done because all corporations engaged in selling to American consumers, or buying from American producers, would also be organized on the democratic basis. Their profits would be distributed, whether from domestic or from foreign trade; one half going to the producing and one half to the consuming interests. Take the case of wheat. For the sake of illustration, let us suppose that the entire crop were handled by a single corporation, not primarily interested in the welfare of either the producer or the consumer, but intent on making the largest possible profit for its members. Suppose that export prices were high, and that the

corporation fixed domestic prices on the same basis. Suppose that its profits were 20 per cent. higher than they would have been except for the favorable foreign demand. One-half of the increase would be added to public surplus and would finally reach consumers; and the other half would be distributed among the contributors of labor or money capital to the corporation in proportion to the value of their several contributions. Organization, management and labor engaged in carrying on the affairs of the corporation would increase their efficiency to the highest possible level, in order to have as large a surplus as possible to be shared. One-half of the increase in surplus so achieved would go over to consumers in the shape of reduced prices; so that the domestic consumer would not only get back all that he paid in increased prices, on account of the favorable foreign market; but he would get a proportionate share in whatever advantage accrued from the fact of a foreign market.

It is of course conceivable that under such conditions the growers of wheat might be at a disadvantage. If a single corporation handled all the wheat, both for home consumption and for export, it might be able to depress farm prices to the advantage of labor and capital invested in the corporation and to the advantage of consumers of wheat products. But we have merely supposed a single corporation for the sake of simplifying the illustration. There would be no such monopoly under a democratic system of industry, because there would be no accumulation of profits to support it. The growers could protect their own interests by organizing producer's marketing corporations, under the plan outlined in Chapter XIV.

How would it be if the foreign demand was weak, and export prices low? When such a condition has existed, dealers have used the foreign market for the purpose of

disposing of the surplus over the domestic demand at the highest price they estimated domestic consumers could pay. They counted on selling such surplus to foreign buyers at lower prices than they charged home consumers. But they bought the wheat from the farmers on the basis of the low foreign prices, on the pretense that the foreign price determined the domestic price. This policy has been injurious both to producers and consumers; to consumers in that they are overcharged for wheat products, and to producers in that the market for wheat is depressed on account of the decreased buying power of consumers, and producers' prices go down accordingly. Under a democratic marketing system, a half of the profits that might be accumulated by any such policy would go back to the consumer, thus protecting him and tending to maintain his buying power and preventing the narrowing of the producers' market. Here again it is to be remembered that there could be no monopoly of markets, either domestic or foreign, under industrial democracy. The field would be equally open to all who wanted to engage in marketing enterprises. There would be free competition, both in the buying and in the selling markets; and any profit made by any corporation would be an economic profit, the legitimate reward for superior efficiency, and would be distributed equitably to those who create efficiency; while always both producers and consumers could protect themselves by organizing producers' or consumers' marketing corporations.

We have considered in the foregoing paragraphs the relation of foreign markets to the interests of American producers and consumers. To avoid confusion, we have purposely left the foreigner out in speaking of the distribution of surplus. But, as we have shown, relations in foreign trade are mutual, equally as in domestic trade. Mutual rights are involved, and fundamental economic princi-

ples apply equally as in domestic trade or industry. It is a matter of exchanging goods or services when there is mutual advantage in such exchange. From the point of view of mutual rights, it is equally necessary to protect the producing and the consuming interests; and from the point of view of the purely economic interests of the parties it is necessary to protect the buying power of each so that he can buy the products of the other. When we export any product created by our industry, the people of the country buying it are the consumers. They represent the consuming interests, to the extent of their purchases. They are entitled to their share in the distribution of public surplus, equally with the purchasers within our own country; and, considering our own interests alone, if a foreign market is desirable, it will be to our advantage to distribute a part of the gain from it to foreign consumers, so that their buying power will be maintained and our markets protected. Exactly as in domestic trade, the reduction of prices to foreign buyers, made possible by increased efficiency, will increase the volume of our foreign business, thus tending again to increase surplus, which will in turn be made the basis of a further reduction of prices. This will continue until "the industry is saturated with the service," when the trade will be stabilized on the basis of equal advantage to both producers and consumers.

It may seem that this would be giving something for which we get no return. If that were true, the trade would not be so much to our disadvantage as it is where we dump a surplus on the foreign market at whatever price we can get for it, for the purpose of getting it out of the way so that high prices may be charged to our own consumers. Besides, the process of dumping surplus on foreign markets unsettles trade conditions, so that producers never know how much the foreign market will absorb. But if foreign

trade is conducted along economic lines, a real and constant demand being developed sufficient to absorb our surplus, we gain instead of losing by including foreign buyers in the distribution of surplus. But if the foreign countries with whom we trade do not reorganize their industries along the same lines, if they retain their present inefficient system, shall we not be giving them for nothing a part of the product of our increased efficiency, since they would have no increased efficiency to share with us? The answer is that in any case we have to take foreign trade as we find it. We now trade with countries of far lower industrial efficiency than ourselves because, notwithstanding their relatively high production costs, we find an advantage in trading with them. Where we sell a staple commodity like wheat or cotton, of which we usually have a large excess over our own requirements, we sell as cheaply as possible, in order to induce foreign buyers to take as much as possible. Where there is competition, we must meet the prices offered by our competitors; so that from any point of view, and considering our own interests alone, it is a wise policy to include the foreign buyer in the distribution of the surplus earnings of our trade with them. Such distribution will cover all the purposes of partronage dividends, bonuses, extra commissions or political bribes for securing trade, and will avoid all the evils and dangers of those methods.

If we should organize our foreign trade on this basis, we need not fear the competition of any other nation. Unless other nations organize on the same basis, they could not compete with us; and if they organize on the same basis their competition would not be injurious to us even if successful, because they would take the trade on account of superior efficiency, or natural advantage; their surplus derived from such superior efficiency or natural advantage would be distributed; and in the course of trade our share

would come round to us. We would share in their superior efficiency or natural advantages, as they would share in ours.

We can make this clearer by supposing the organization of a corporation specifically for the exporting of surplus products. It might indeed be a wise policy, in order to stabilize the markets for such products as we export in large amounts, to organize a corporation that would connect the producers of such goods directly with the foreign market. This would be done in the following manner:

For convenience, we will suppose that the products to be exported are wheat and cotton, understanding that the organization will serve equally well for other products. The corporation would be organized on the plan of the producers' marketing corporations outlined in Chapter XIV. It would be composed of those investing labor or money capital, and of those having wheat or cotton to be exported. But, in this case, the wheat and the cotton would come through coöperative cotton or wheat marketing associations, which would be represented in the export corporations. Captial stock would be issued to investors of money capital, and labor stock to investors of labor. There would also be issued a labor stock—or patronage stock, if such designation should be preferred—to the representatives of the cotton or wheat growers' associations. Control would be shared as in the case of producers' marketing corporations, and surplus would be distributed on the same basis. Now suppose that in any year there should be an unusually heavy crop of wheat or cotton, produced at unusually low cost; and suppose that at the same time there is only a usual or even short crop in competing countries. The wheat or cotton may be sold to consuming countries at prices based on the production and costs of competing countries, or at just enough under to make sure of the mar-

ket. If the American producer is paid a price that will cover cost plus his usual profit, the corporation will have an unusually large surplus. A half of this surplus will be distributed to investors of labor or money capital, including those whose wheat or cotton is marketed; and the other half will go to public surplus, and will finally reach the consumer in the form of reduced prices. In this case the consumer is the foreign buyer. He will receive a part of the advantage of our unusual crop. Now suppose that the following year there is a glut of wheat or cotton everywhere. There is active competition for the foreign market, and prices go down. We have attached our customers to us by our fair and liberal treatment of the previous year; and if it is understood that the policy is to be continued, it will be more than likely that we will hold our trade, even though our competitors underbid us. There would grow up a relation that would be in effect a permanent contract between ourselves and our foreign customers that would assure us a market for our surplus and them of a certain supply.

Relations might be made even more definite. The export corporation might include the consuming as well as the producing interest. Representatives of foreign buyers might share in the control of the corporation on the basis of what they bought through it, as representatives of producers share on the basis of the products they sell through it. If they bought all the products exported, they would get the whole of the surplus earnings that go to the consumer. The same plan would be applicable where we are importers instead of exporters, the only difference being that we then have the consuming interest, and the foreigner the producing interest.

With such relations established between this and another country, competitors not so organized could not cut

in anywhere. They could not compete because they would lack both the efficiency to meet the prices of the corporation and the connection through which to do business. They would be compelled to organize on the same basis in order to share in the trade. When they organized in accordance with the same economic principles, foreign trade relations would be stabilized on a basis of mutual justice and mutual advantage, and international trade warfare would be forever abolished.

For the carrying out of this plan, we do not need to wait upon the agreement of other nations. It could be done more easily under a general international agreement, and results would come more quickly. We could do it more easily with the support and coöperation of another great industrial nation—such as England—with whom we have a considerable volume of trade. But we can do it by ourselves and on our own initiative. Under present conditions we can practically choose the foreign trade we want. We are already in a strong position because of natural advantages, unimpaired man-power, superior labor efficiency, and sound credit; and with our industry organized on the proposed basis of justice and efficiency, there is no nation that can compete with us, unless it organize on the same basis. If it organizes on the same basis, its conpetition will in the long run benefit instead of injuring us because, if it cuts into our trade, it will be because of superior efficiency or natural advantage; and the earnings derived therefrom will be distributed and we will share them.

It is to be expected that the stronger industrial countries would soon follow our lead. Suppose that we would begin supplying wheat and cotton to England on the basis proposed. We should soon have complete control of the English market for those products, to the extent of our ability to supply it. English producers would not be slow

to see that they might secure the American market for certain manufactured products for which they are now in competition with Germany or some other country, by organizing on the same basis. Her competitors would be compelled to follow; and the result would be world coöperation on a basis of mutual advantage and square-dealing.

International Credit. Foreign trade can not be restored to a prosperous condition until international credit has been reëstablished. The debts of the nations of the world in 1921 have been estimated by Mr. O. P. Austin, chief statistician of the National City Bank, at $382,634,000,000, an increase since 1913 of more than $300,000,000,000. The greater part of this huge sum is owed by nations now regarded as practically insolvent, the combined debts of Austria, Germany, Poland and Russia alone being over $175,000,000,000. The Russian debt consists principally of the obligations of the deposed Tsarist government, and is held chiefly by French and Belgian bankers. The obligations of the Germanic states are held chiefly by their own subjects, as are those of the Allied nations, with the exception of what they owe to the United States. The debts of the Allied countries to our government amount to approximately $10,000,000,000, plus unpaid and accrued interest.

These are the debts of the nations themselves. Neither the debts of national sub-divisions nor of private individuals or corporations are included. In this country, the municipal, State and private debts amount to approximately five times the national debt. Assuming that the same proportion holds for other countries, the total of all public and private debt for all civilized nations will be over two thousand billion dollars.

These estimates are based on par, at the exchange value of the dollar in 1921. If stated in the inflated currencies

of the different countries, the total would be vastly greater. These obligations were mostly incurred during the recent period of inflation when the purchasing power of the dollar was about half of what it was in 1913, and at that time currency was greatly inflated, owing to the fact that there had been a long period of heavy gold production, or to other causes. It is now held that in order to restore the credit of Europe it is necessary to return to the gold basis. What does this proposition imply? It not only implies that those who hold this vast debt are to be allowed to collect on the basis of pre-war values, but on the basis of an even greater money value. The ratio of money gold to total debt was about 1 to 40 in 1913; it was 1 to 256 in 1921. All the money gold that the world possessed in 1913 would have paid one-fortieth of its debt; in 1921 it would have paid only one two hundred and fifty-sixth part of its debts.

This is assuming that municipal, State and private debts were in the same ratio to national debts in 1913 as in 1921. This, however, is unlikely. National debts were tremendously increased on account of the war; while other debts were also to some extent affected by war conditions, it is practically certain that the rate of increase has been much less. In the United States, the farm mortgage debt about doubled during this period. It has been estimated that the bond issues of corporations were increased in about the same ratio. Though increases in municipal and State debts have probably been greatcr, we may estimate that the average increase in all debts except the national debt has been one hundred per cent. since 1913. If there has been the same percentage of increase in other countries, the total of all world debts in 1913 may be estimated at approximately one thousand billion dollars. The ratio of gold to this total was as 1 to 133; that is, in 1913, all the money gold the world possessed would have paid one one

hundred and thirty-third part of its debts, while in 1921 it would have paid only one two hundred and fifty-sixth part.

The total increase in the world's debt since 1913 is approximately twelve hundred billion dollars; a half of this represents pure inflation. It is an approximate measure of war profiteering. Therefore, if creditors now collect on the basis of 1913 values, debtor nations, States, municipalities and private corporations and individuals will be paying them six hundred billions that they never received. But the proposed return to the gold basis means more than this. It means, if it means anything, that more than two thousand billion dollars of debt is to be paid with less than nine billion dollars of gold. It means more than this. The world's creditors have the gold. If we return to the gold basis, we shall have to do business with money redeemable in gold. Debtor nations, corporations or individuals, will have to borrow gold, if they are to pay their debts in gold, or they will have to borrow it in order to produce goods to sell for the gold with which to pay their debts. No one pretends that the business of the world will be carried by the eight or nine billions of money gold in existence. Our net production was in round numbers $60,000,000,000 in 1919, which was carried on a bank credit of near one-half that amount. We paid interest on that bank credit, in addition to the interest on long-time loans. Our interest burden could hardly have been less than $10,000,000,000, or one-sixth of our net production. Assuming that the world production bears the same relation both to world debt and to the amount of credit necessary to carry production, total production will be approximately one thousand billion dollars, and the annual credit five hundred billion dollars. At seven per cent., the interest on the credit necessary to carry the business will be thirty-five billions which, added to the interest on the total debt gives a total

interest charge of one hundred and forty-five billions. So that it will require sixteen times all the money gold in the world to pay interest for one year on a debt that is payable in gold.

It is, of course, unlikely that other nations will be able to produce in the same ratio to their debts as the United States.

It is possible, though not extremely probable, that their smaller production can be carried on in smaller current credit. That only makes the situation more hopeless. If we estimate the total annual production at only five hundred billion, instead of a thousand billions, the difference in the interest charge will be only seventeen and one-half billions. There will still be nearly one hundred and twenty-eight billions annually to be paid out of less than nine billions of gold; and that would come out of production wholly inadequate to sustain the productive energies of the people.

It is, therefore, impossible for the world to pay even the interest on its debts in gold. This fact is recognized by the more thoughtful of those who hold that we must return to the gold basis. They propose that debts be in some ratio scaled down so as to make it possible to pay in gold. But scaling down a debt of two thousand billions, so that it can be paid in less than nine billion dollars of gold—and the greater part of that already in the hands of creditors—plainly would mean the practical extinguishment of the debt. The truth is that there is practically no gold available with which to pay debts, or even the interest on them. And so as long as these huge debts remain, and are collectible in gold, world industry and trade can not recover permanent prosperity, because those who hold the obligations may at any time pounce down and demand payment.

What is the alternative to the gold basis? Are we to

adopt a universal paper money, and let inflation run riot throughout the world? Shall we Germanize and Russianize all our industries? Those who put the matter in this way assume that we must have either the gold basis or fiat money. They also assume that doing business on a so-called gold basis does mean inflation. The fact is that it means nothing else. If the gold-money advocates carry out their plans, what we shall have will be a funding of the world debt in obligations made payable in gold. As we have shown, it will be impossible to pay them, or even the interest on them, in gold. No one with any knowledge of world financial conditions has the least idea that payment will ever be made in gold. What is evidently contemplated, and what in any case will happen, if the plans of the gold money advocates are carried out, is that the funded promises to pay in gold will be used by their holders as a basis for the issuance of bank money. We shall then have, not a gold money, but a money representing debts that never can be paid. The volume of money will not be regulated by the volume of gold—that is not contemplated, and that, as we have shown, is impossible; it will be regulated by the volume of debts.

This is not economic credit. It is financial credit, representing claims established against production, for which there was no equivalent in services, and is no equivalent in existing wealth. It is a credit in the hands of an interest outside of the productive system. It is not a credit to productive industry, but a deduction from its credit, just as the debts of an individual are a deduction from his credit.

We have defined capital as consisting of ability to deliver things of value, "as, when and where required." The function of credit is to facilitate the exchange of things of value. The measure of the credit of an individual, corpo-

ration, or nation is this ability to deliver things of value, "as, when and where required." The credit that one nation will extend to another, therefore, is made up of two factors—the desire of the first to obtain things of value, and the ability and willingness of the second to deliver them. The financial credit of a nation is measured by its ability to deliver money, as, when and where required. A nation may be rich in money credit, but poor in economic credit, or vice versa. But money is a generalized demand upon all existing capital—goods and services—and its function is to facilitate the exchange of goods or services. Therefore, the financial credit of a nation ought to correspond to its economic credit. A nation ought to be able to obtain money—a demand upon the world's stock of exchangeable goods or services—in the exact ratio of its ability and willingness to contribute to that stock of goods or services.

If it were a question of trade exclusively between one nation and another, each would credit the other in proportion to its estimated ability to deliver goods or services. If the trade were direct and payment immediate on both sides, it would be a matter of international barter—no money would be required. But, among nations as among individuals, trade has become generalized. We may want coffee from Brazil, and have nothing but flour to exchange for it, at a time when Brazil has all the flour it requires. But we may be able to exchange our flour in France for other goods, which Brazil will accept for coffee. Or we may not know just what we shall want in exchange for our flour, in which case it will be desirable to secure in exchange for it a demand upon all exchangeable goods or services that will give us a choice among them that we may exercise at any time. That is, we want money, or financial credit

in exchange for our flour. We desire to trade a particular credit—our exclusive claim to the flour we have produced, for a general credit—a claim upon all that all the nations have produced or may in the future produce.

How will the nation that wants to buy our flour obtain the money—the financial credit—with which to pay for it? Its economic credit is measured by its ability to produce and deliver goods or services. (Credit equals production plus appreciation, less consumption plus depreciation.) It is entitled to financial credit equal to this economic credit. If it owed no debts its credit would represent its surplus over its own consumption. But all the nations owe debts which, if they are funded, represent in the hands of their creditors a first claim upon the total production of all nations. On the average, it requires one-sixth of the net annual production of a nation to pay the interest on its debts. It will have no surplus as a basis for financial credit. It must borrow from its present creditors the financial credit with which to buy our flour.

The financial credit so obtained will not consist of gold. It will consist of bank money issued upon promises to pay debts in gold; debts, the annual interest on which amounts to more than fourteen times all the money gold in the world. We need not consider the possibility of the payment of the principal, because under the present system there is no such possibility. Nor need we contemplate the ever-present menace that interest payments, for financial, political or other reasons, may at any time be demanded in gold. Assuming that such payments as are made will be made in bank money that is based on promises to pay gold that no one expects will ever be fulfilled, the burden will be greater than the industries of the world can bear. The annual net production of other countries on

the basis of population probably will not average more than a fifth as much as ours. Even if we suppose a production of half as much, the total production of all principal countries measured in 1919 money values, would be only a little over $500,000,000,000. So that it would require considerably more than a fifth of the total net production to pay the interest on the world debt, if payment be accepted in inflated money. It would take nearly twice the total net production to pay it in gold.

It will be said that these figures are misleading, for the reason that we owe debts to each other, and that when they are paid, what is taken from the wealth of the debtor is added to the wealth of the creditor. It may appear that in the final accounting the debts will largely balance each other. That is not the case. These debts do not represent chiefly accumulated transactions in the course of a proportionately large economic production, that may be squared off by a general liquidation, but accumulated profits, taken in excess of production. Furthermore, they are so closely concentrated in a few hands that their holders cannot possibly expend, either for consumptive or productive purposes, more than a fraction of the annual interest received. Therefore, the interest must be re-invested and added to the already enormous burden of the charge capitalized against industry. The truth is that world industry is over two thousand billion dollars "in the red" and going farther in every year.

This condition of world bankruptcy is not primarily due to the war. It is a result of a process that the war brought to a crisis. It is due to the accumulation of profits and the consequent impairment of the world's buying power—of its credit. The only way out is to prevent the accumulation of profit.

But we must first deal with the present accumulation

of profits—the existing debt. Those who hold it will not release the productive forces of the world until it is paid or satisfactorily funded. If this is not done war may at any time be renewed, and may not cease until resources, organization, productive ability, debts and all have disappeared in one universal ruin. The world debt is a sword of Damocles, hanging by a hair over the head of civilization.

The world can not satisfy its creditors, except by convincing them of its ability and willingness to pay the debt. It can be paid only out of the surplus of the world production over what the world consumes. The credit of the world, with regard to the payment of its debts, is then measured by its ability to pay interest and installments on principal, and at the same time to maintain it energies and carry on. We have shown that under the existing industrial organization we can not hope to pay even the whole of the annual interest on the debt; so that it will be an ever-increasing burden upon production. Creditors are aware of this fact, and for that reason are unable to agree upon any method of funding. All kinds of wild proposals have been made, It has been proposed that all obligations between nations be wiped off and that we begin over again with a clean slate. It has been proposed that all debts be scaled down in some unspecified ratio, so that payment can be made on a gold basis. It has been proposed that the gold standard be finally abandoned, and an international money created in its place, which would be receivable in payment of debts and in the carrying on of international industry and business.

The first proposal is unfair and impracticable; unfair because the debts of the several nations differ both in amount and character; and impracticable because the nations could never be brought to agree to it. If all debts

are ever extinguished without payment, it will be by war, and not by peaceful agreement. We have already shown the impracticability of the second proposal. Now as to the third. If the world debt is ever paid, it will be paid in money that will be in effect an international money; that is in money that will be accepted in the balancing of international trade. Where the money of any particular nation is so used, it becomes an international currency. Money is good to the extent that it will be accepted in payment of debts or in exchange for goods or services; or, in more technical terms, so long as those holding claims against goods or services will release them in exchange for it. Money that represents production—goods in existence, or ability to produce goods or to perform services—will be taken in exchange for goods or services or in the payment of debts. The credit of the world is measured by its capital, and its capital is its ability to produce—to deliver things of value, as, when and where required. The total economic credit of the world is the "correct estimate of its ability to deliver things of value, as, when and where required."

The holders of the world debt require the delivery of money, as annual interest payments and installments on principal. We can obtain the money only by producing a sufficient surplus over consumption; and we must consume enough to maintain our productive energies. Can we produce enough? What is the extent of our economic credit, upon which must be based the financial credit necessary to pay our debts and conduct our industrial and business operations? These are the facts that must be faced in considering the problems upon the solution of which depends the existence of modern civilization.

It has been estimated that in 1919 American industry was operating at no more than 20 per cent. efficiency. Our

net production in that year is estimated at $60,000,000,000; so that 100 per cent. production would have been $300,000,000,000. Supposing that our consumption were $50,000,000,000 in 1919, and that it would be doubled if production were brought up to maximum capacity, there would remain a surplus of $200,000,000,000. This would be more than enough to wipe out all of our public and private debts, except such as are represented in share capitalization; and enough to cover more than half of the total, including share capitalization. Assuming that world production on the basis of population was half of our own in 1919, and that it could be increased in like ratio, its maximum net annual production would be two and a half thousand billions. If the world consumed all except what was required for interest payments in 1918, its consumption was, on the basis of the above estimate, about four hundred billion dollars. If this were doubled as a result of bringing production up to maximum, consumption plus interest would be nine hundred billions, leaving a surplus of sixteen hundred billions. At this rate, the debt could be extinguished in less than two years. If consumption were trebled, the surplus would still extinguish the debt in less than two years. If consumption increased in the same ratio as production, the debt could be cleared off in a little more than four years.

How can we bring production up to maximum? Our department of Commerce estimates a possible saving of from 20 to 100 per cent by the elimination of waste in the present system of industry. But we have shown that by far the greatest waste is an economic waste that is inherent in the present system. It is due to the fact that coöperative industry is not organized on a basis of economic efficiency, and that production is not balanced with consumption. What is required therefore to establish world credit and

to assure enduring world prosperity is the same thing that is required to establish and assure our own prosperity—that is, economic coöperation. Economic coöperation is democratic coöperation. It is industrial democracy.

XIX

PEACE AND PROSPERITY

THE most valuable of all human assets is a well-grounded faith in ourselves. All great human achievements are the result of enthusiasm, and enthusiasm is the result of a high sense of the value of the end sought and a firm belief in the possibility of its accomplishment.

During the period of industrial depression that began early in 1920, there was much talk of the value of optimism. Business men, bankers, editors and politicians made the preaching of it a profession. But their preachments rarely had the ring of sincerity. They were not based on a reasoned belief in the possibility of industrial recovery. Since these professions of optimism so apparently lacked sincerity, they tended rather to weaken than to strengthen the faith of the people in their ability to restore industrial prosperity. They destroyed the enthusiasm for achievement by weakening the faith of the people in themselves.

These professions of optimism were not based upon any rational plan for restoring industrial prosperity. In so far as they were at all sincere, they rested upon a vague, general belief that things would turn out right of themselves. We would recover from industrial depression because we had always recovered before. Depression had been brought about by "the interaction of economic forces," blind cosmic "forces" beyond human control, and it was assumed that prosperity would be restored in the same way. "It is impossible to sink farther than to the bottom," etc. Such was the crudely fatalistic philosophy upon which we

rested our hopes for the restoration of industrial prosperity.

Even now that we seem to be entering upon another period of industrial expansion, there is no firm basis upon which to rest a hope that it will result in the establishment of permanent industrial prosperity. On the contrary, all signs point to the probability that we shall go through another "business cycle," that will end in another period of depression that may be even worse than that from which we are now emerging. In fact, business expansion, the process that always prepares the way for depression, is already well under way. Prices are moving upward—not equally, but according to the ability of each interest to control its production and its markets. An advance in the prices of certain farm products that occurred early in 1922 furnished the necessary stimulus. That advance took place after most of the products affected had left the farmer's hands, and it has already halted. On the other hand, the market for steel, copper and other monopoly products is "strong." Prices are being advanced with caution, but with a uniformity that presages another era of heavy profit taking. It is a practical certainty that there will be another accumulation of billions in monopoly profits, that will again absorb the buying power of the people, and that will add still more to the crushing burden of investments against production.

In the mean time, the drive for the "deflation of labor" continues. Monopoly interests insist that wages must go still lower, as a condition precedent to the resumption of full production. This means that labor must continue its hopeless struggle to advance wages in proportion to the increased cost of living that will result from advancing monopoly prices. Labor can not hope for more than partial victories. Wages will rise; but not so fast as the cost of living. Farm prices will advance; but also less rapidly

than monopoly prices. The result is as certain as that night follows day; we shall again reach the crest of price and profit inflation, where goods produced by our industries can no longer be marketed at the prices asked. There will be another "buyers' strike," which simply means that consumers will have reached the limit of their buying power; and there will follow another period of depression, in which farm prices will again go down faster and farther than monopoly prices. This will again be followed by stagnation in other industries, the closing of plants, unemployment, want and starvation.

It appears, therefore, that under the present system there is no rational basis for industrial optimism, even in the certainty of business recovery. In fact, it is not expected that recovery will bring permanent prosperity. All that is hoped for is that there will be another period of inflation and profiteering that will necessarily bring another period of deflation and loss.

Nor do we find any ground for hope in current economic writings. Scholastic economists always inclined to pessimism have recently confined themselves almost wholly to the task of justifying the existing industrial system, and explaining why we can not be prosperous. Only the gloomier doctrines of the older economists receive any considerable attention. The Malthusian theory of diminishing returns seems still to be regarded as sound, though it is admitted that "overproduction" is the chief cause of recurring periods of industrial stagnation, and therefore the principle obstacle in the way of permanent prosperity. The economic "heresy" of Henry George's "Progress and Poverty" is sometimes appealed to in order to show that we can not hope to get rid of poverty. Even the hated doctrines of Marxian socialism have been drawn upon for this purpose. Arguments that might have been taken directly from "Prog-

ress and Poverty" have been employed to show an irresistible tendency towards the concentration of industrial control and the capitalization of productive ability into profits. Not only is the possibility of a remedy ignored, but it is held that those who do the work of production must continue to allow the greater part of their earnings to be taken as profits, so that the supply of "capital" may be maintained. This doctrine has been stripped of all pretense that it is anything else than stark economic determinism. Those who hold it make no attempt to defend the accumulation of profits as being beneficial to those who do the work of production, or, for that matter, to anyone else. They simply maintain that consumption must be restricted; that wages must be kept at the lowest possible level; that workers must exert their utmost efforts; and that every one must scrimp and save, in order that there may be more profits, to be added to capital as a basis for the making of still more profits. It is held that this is the only way in which the economic system will work. It is pictured as a sort of Moloch, to which we must sacrifice our labor, our happiness, and our lives.

Nor have we yet sounded all the depths of pessimism to which modern economists have descended. They have recently discovered the "business cycle"; and to this wheel of evil fate they have bound business, a passive and apparently willing victim. According to this doctrine of the business cycle, all industrial and business activity passes through alternating stages of expansion, increasing confidence, advancing prices, higher wages and greater profits, until products can no longer be sold at the prices asked; then confidence weakens, prices fall, wages are reduced, margins of profit are narrowed or eliminated, industry is curtailed, employment fails and we find ourselves in the grip of hard times. After we have reached "the bottom," it is assumed

that confidence will be restored, prices will begin to advance, and the cycle renewed. There can be no question of the facts that constitute the "business cycle." It is beyond question that there are such alternations of "prosperity" and depression. Nor can we be certain that there may not come a time when we will not be able to recover from one of these recurring periods of hard times. But why should it be assumed that we must drink the very dregs of industrial depression? Is it not possible that the passive acceptance of this doctrine is largely responsible for the hastening of the period of depression and for its unnecessary prolongation?

The outstanding fact upon which the theory of the business cycle is based is that the period of prosperity ends and the period of hard times begins where the buying power of consumers fails. Hard times, therefore, are the result either of actual overproduction or of there being too great a charge to consumers for what is produced. But there can never be overproduction so long as there are wants remaining unsatisfied. It would seem that this fact ought to have suggested to economists that hard times might be prevented by providing for a better distribution of products. It would seem that, in so far as there is actual overproduction, it ought to be taken as a refutation of the doctrines of the older economic pessimists. But our economists hold to the gloomy aspects of both doctrines. They continue to assume that those who do the work of production must "work harder and eat less," though the failure to eat up all that has been produced to be eaten is admitted to be the cause of hard times. They even cast about for a method of disposing of surplus products other than their consumption by those who produce them. It is said that in the past the extravagance of courts, the construction of government works and wars have been the chief means of

relieving industry of its surplus goods. It is admitted that our productive capacity has become so great that these means will no longer be sufficient to relieve us of surplus products. What is the solution? "Vicarious consumption"; another economic hybrid, twin brother to the doctrine of the business cycle. It is proposed that surplus products be consumed by a leisure class. This is suggested in the interest of those who do the work of production. The leisure class is to eat up what workers produce, in order that they may enjoy the inestimable privilege of keeping on working! It is assumed that the leisure class will have morality, culture, intelligence and wisdom, so that they will use surplus wealth to the benefit of society as a whole. No leisure class has ever been especially rich in these qualities. But suppose that we should develop a leisure class that possessed them in the highest degree, what could it give to those who work? It could give them only wealth or leisure—just the things which it is assumed they had too much of at the beginning. It could not give them the qualities of mind, heart and soul which it is assumed they lack. It could not give them happiness; it could not live their lives for them.

The absurdity of this proposition is shown in the very words in which it is expressed. By similar reasoning, production by a class that does not consume what it produces should be called "vicarious" production. Industrial production is the result of the application of human energy to natural resources. Energy is sustained by the consumption of products, and in no other way. So that there can be no production without consumption by those who produce; and consumption by anyone else is economic waste. The same principle applies to all human activity. Work is the basis of all human development, physical, mental or moral. It is the basis of culture; it is the source of art; it is the

foundation of moral and spiritual ideals. Political and social institutions are largely the outgrowth of industrial activities. But work done by those who are insufficiently nourished, or who have not the necessary facilities with which to work, is inefficient. Work done under compulsion is slavery; and slavery is destructive of all that is good, both in the slave and in the master. Increased efficiency, higher development, better living, greater happiness are possible only when there is in the same individual a surplus of energy over what is necessary for doing in the old way the task immediately in hand. There must be something over to be used by the brain in coördinating the muscles to the new way. There must be, above all, a conception of the possibility of improvement, and the will to accomplish it; and these also are the result of surplus energy in the individual doing the work. Surplus energy in another person, having no relation to the work being done, will be of no use. Under such conditions, drudgery will destroy the efficiency of labor and slothful extravagance will be equally fatal to those who live by the fruits of the labor of others.

Of a piece with the idea that those who do the work of production must not be allowed to consume the surplus they produce is the idea that workers must be kept in constant fear of poverty. Employing interests have recently revived this ancient and inhuman doctrine. It has repeatedly been said that labor will never be efficient until workers are "inspired with a wholesome fear of losing their jobs." If employers depend, however, upon the motive of fear "to keep labor in its place," labor will adopt a like policy with employers. It will build up its fighting strength, and will hold the strike and like methods as a menace over employers. The consuming public will be compelled to protect itself against both by an ever-present threat of force. Industrial conflict will be perpetuated. Efficiency will de-

crease; and decreased efficiency will result in greater poverty, which will breed still greater fear, suspicion, distrust and hatred.

It is obvious that neither national nor international security and prosperity can be based upon any such motive. Confidence and fear are utterly irreconcilable mental conditions; and it is universally agreed that we can not have either economic prosperity or social and political peace without confidence. If we are to have enduring prosperity and permanent peace, there must be not only confidence but courage. Hope is the inspiration of free men and fear is the lash of slaves. Courage is born of faith—a well-grounded belief in ourselves. This faith can be created and maintained only by free and successful coöperation in the achievement of common ends that are mutually beneficial.

Industrial prosperity does not rest wholly upon our confidence in one another, it rests in part on physical conditions. There can not be successful coöperation in the production of the things that will satisfy our economic wants, unless there exists the natural resources out of which to produce them, and unless there can be developed and maintained the necessary human energy. Nor can there be the confidence necessary to inspire courage and to support successful coöperation, unless there be practical proof of the physical possibility of achieving the ends for which we coöperate.

The very fact of the existence of poverty tends to keep alive the belief that it is physically impossible for the wants of all of us to be supplied. It is hard for the man who works twelve hours a day in the scorching heat of a blast furnace to believe in the possibility of his making a better living by less or more agreeable work. It is difficult to convince the farmer who spends every daylight hour in arduous physical toil that it is possible to arrange conditions so that he could support himself and his family by half as much

work, and employ the remaining time in the enjoyment of the fruits of his labor. The business man or the owner of a factory who barely gets by with the utmost exertion on his own part, and with all that he can get out of his employees, will hardly give patient consideration to any proposal that it is possible to produce enough to satisfy the wants of all with half the amount of labor that is now being expended. The mother of a family, trying to make ends meet on a family income only half sufficient to supply its reasonable needs, can hardly escape the conviction that poverty is a curse that can not by any possibility be escaped.

Everywhere and in every age, autocracy and special privilege have capitalized these conditions, to keep the majority of the people in subjection. They have by every possible means kept alive the idea that it requires constant drudgery and the most rigid economy in expenditures in order to maintain a mere existence. Yet it is easy to show that modern production is limited, not by physical conditions or by the possibilities of the development of individual ability, but by failure in the coöperative system. Our natural resources are practically unlimited. The State of California alone could produce the principal necessaries and many of the luxuries for the sustenance of half the population of the United States. California, Oregon, Washington, Idaho, Montana and North Dakota—only six States out of forty-eight—could produce all the breadstuffs, wool, lumber, coal, dairy products, fruits, meats and fish necessary to support the entire population of the country for many years to come. Adding Minnesota, Wyoming, Utah and Oklahoma or Texas to the group, it could supply also all the iron, copper and oil needed by the entire country. Even under the blight of monopoly control, ability to use natural resources far out-strips the capacity of the economic system to distribute products to consumers. It

exceeds the ability of consumers to buy; so that it is not the lack of physical resources nor the failure of human ability, but the failure of buying credit that limits the satisfaction of economic wants—that prevents the realization of industrial prosperity.

It has been truly said that a single fact that can not be reconciled with a particular theory is sufficient to overthrow that theory. A single fact—the fact of "overproduction"—defeats and disproves all the theories of economic pessimists from Malthus to our own time. The answer to Malthus is sounded by the whistles of a hundred thousand locomotives and the horns of ten million motor cars. It is sung by the busy wheels of a million factories. It is spread, as on a glowing canvas, over a billion acres of fertile fields that but yesterday were wilderness or desert waste. It is sung in the purring of the labor-saving machines that have so greatly relieved the drudgery of every household. It is set to tragic music in the near-bankrupting of our farms, in the sufferings of our millions of unemployed and in our aggregate loss of a hundred billion dollars during the recent period of industrial depression that was due to the inability of the people to buy all that by their labor they could produce.

We have shown in the preceding chapter that if production were increased to the maximum estimated by statisticians, we could increase consumption 100 per cent., and still have a surplus in a single year that would more than cover all our public and private debts. We could pay all the public and private debts of the world out of the surplus of less than twelve years. If world production were increased to maximum, all the public and private debts of the world could be paid out of less than two years' surplus, after increasing consumption two hundred per cent. And the increase in consumption would be necessary to the increased

production. So that, when we have increased production to the limit of our physical and economic possibilities, we can pay not only all the debts that now threaten the peace and progress of the world, but we shall have supplied all economic wants—we shall have economic prosperity.

This will be accomplished by economic coöperation; free coöperation, successfully applied to the achievement of a common and mutually beneficial end. That end—the sole legitimate end of industrial activity—is the satisfaction of all the economic wants of all the people.

We have presented in the foregoing chapters of this book an analysis of industry showing what is necessary in order that industry may fully and adequately discharge its sole function of supplying economic wants, and we have outlined a plan according to which this will be accomplished. It is a plan for economic coöperation. Its adoption will secure the highest industrial efficiency that is physically and humanly possible, and it will assure the distribution of the products of industry so as absolutely to prevent the congestion of products and the resultant cutting down of production before all the wants of the people have been supplied. We have shown how the adoption of this plan will solve our industrial or financial problems, whether internal or international. We have applied it to the problems of transportation, credit, agriculture, national resources as typified by the coal industry, and marketing and foreign trade, showing its practical application in each case. We have shown that it will reconcile the conflict between "capital" and "labor," as well as the apparent conflict between the producing and consuming interests in industry; and we have shown how it will remove from the farmers the burdens that have been oppressing them, and save the industry upon which the existence of the nation depends. We have shown how it will restore and establish both national and

international credit, by providing financial credit that will be based solely on economic credit, representing ability to produce and deliver things or services in the satisfaction of economic wants. We have shown that it will assure permanent peace, by eliminating industrial conflict, which is the most prolific cause of war.

In the writing of this book on industrial democracy, it has been the fixed purpose of the authors to carry to the people of the United States and of the world a message of hope. But we have not attempted to minimize the seriousness of the industrial situation as it exists to-day, nor the futility of the methods adopted or recommended for the restoration of peace and prosperity. Optimism is worthless that is not rooted in fact. We have shown that the physical facts, as well as the fundamental human facts of our present situation, warrant the highest optimism. But we have also shown that in our own country and in the world at large, the only way to restore peace and prosperity is to reorganize industry on the basis of the principles of democracy.

How are we to set about this work or reorganization? Who is to take the initiative? Europe is in a condition of industrial and economic chaos, from which there is no present hope of her emerging.

The Old World seems to be preparing for a conflict between the rival economic and industrial systems of capitalism and communism, that may involve all civilized nations. The triumph of either of these systems would be disastrous. They are both unsound, because they are both destructive of economic efficiency and of human rights. Only industrial democracy—a system based on economic efficiency and individual and social justice—can save Europe from the menace of industrial autocracy based on the control of capital, or the equally dangerous menace of communism

based on the control of both labor and capital. But it can hardly be expected that the initiative in the reorganization of industry can come from Europe, unless it comes as a last desperate attempt to prevent the destruction of civilization by the renewal of war, or after the collapse of both capitalistic and communistic autocracy as a result of the renewal of war. Can we in America afford to wait upon any such contingency?

The initiative must be taken in America; and it must be taken by those of us in America who have most faith in the principles of American democracy. In this country, we can proceed with the most necessary work without violence to our traditions; without revolution; without taking away any vested right; and without departure from our usual methods of adjusting economic and industrial relations. We can establish industry on a basis of efficiency and justice by applying to it the principles upon which our nation is founded—by organizing industry so as to secure to every individual the equal right to life, liberty and the pursuit of happiness.

The plan should be applied first to public utilities and basic industries, and then, as fast as the people are educated to a sufficient understanding of its principles and their practical application, to all other coöperative industry. The democratization of public utilities and basic industries alone will provide for increased efficiency where it is most needed. It will distribute profits and restore and maintain credit, both for consumption and for production. It will eliminate industrial conflict, thus at once removing the greatest menace to our national life and the greatest obstacle to industrial efficiency. It will remove the chief source of political corruption, because it will do away with industrial and financial monopoly, which have been chiefly responsible for such corruption.

One thing the last war did for the world; it tore the mask of religious and moral hypocrisy from the face of every nation. No nation any longer claims Divine sanction for the things it wants to do. Every nation frankly admits that self-interest is its chief guiding motive in its dealings with other nations. Though this may seem sordid and materialistic, it is really, on the whole, a hopeful condition. If every nation holds honestly and openly for its material self-interest, a fair compromise is much more likely than it would be if some or all pretended to be animated by higher motives. And if attempts to reconcile conflicting self-interest lead, as they may, to the recognition of the fact that there are common interests more important than separate self-interests, there is good ground for the hope that a method of adjustment may be found that will be more nearly in accord with fundamental morality and religion than would have been possible if the old hypocrisies and hollow pretenses to morality and religion had remained.

Here are the cold, hard facts of the world situation, that are frankly admitted by all the greater nations. International policies are concerned with oil in Mexico, Roumania and Russia; coal and iron in the Ruhr district; coal and other resources in China and Manchuria; markets every where; and with the control of financial credit. Excluding the primitive nationalism of the group of small nations in central and eastern Europe, material self-interest is openly and admittedly at the bottom of every international conflict. It is in every case a question of industrial or financial advantage—a question of resources, markets or credit.

Contrary to what appears to be the prevailing popular belief, the chief immediate danger in this situation does not lie in the direct control of international relations by great industrial and financial interests. It lies rather in the fact

that there is no such control. American interests want to exploit Mexico, China and possibly some part of the Russian possessions. It is to be presumed that American financial interests expect to derive important advantages from the exceptionally strong position with regard to world credit that they obtained as a result of the war. English interests want to control the oil fields and other resources of Russia. Germany regards her economic future as being closely bound up with that of Russia; and France looks longingly to the possession of all the coal and iron resources that lie along her border. England wants to recover her old position in world commerce; and Italy wants to strengthen her trade relations with the Near East, and with her neighbor to the north. Japan has like ambitions in the Far East. But there is no such thing as a united policy among the great industrial, commercial and financial interests of the different countries. Such a united policy would undoubtedly be a grave menace to the rights of the people of all nations; but it might at least serve to reconcile present international difficulties and to prevent the immediate resumption of war. There can be no such unity. Industrial and financial monopoly interests are necessarily antagonistic among themselves, as well as to those whom they exploit. They are breeders of industrial warfare, not of economic peace. There can be no unity and no peace in industry, unless it be organized in accordance with those principles which from the nature of industry as a human activity must govern it.

Therefore the one hope of humanity is industrial democracy. There is much talk of aiding European countries by extending credit to them. But financial credit will not help them, if they have not a basis for it in economic credit. We can not loan them economic credit, except by entering into trade relations with them that are mutually beneficial.

And there can not be complete mutuality in international trade, any more than in internal industry, unless it be organized and conducted on a basis of democracy; unless the several industrial interests be equally protected, and production and consumption be equally balanced. The way to help Europe is to place our own industries as soon as possible on a democratic and efficient basis. This reorganization would necessarily include our trade with foreign countries. In building up our own economic credit, we would be helping other nations to establish theirs.

Under the system proposed, the struggle between the great industrial and financial groups of rival nations for the control of natural resources, markets or credit would be eliminated or rendered harmless because any advantage that any of them might obtain would be distributed in the division of surplus between producers and consumers. Every people that entered into international trade at all would share equitably in all the advantages, both natural and economic, of every nation with which it traded. Nothing could be gained, by the nation itself or by any group or interest among its citizens, from any monopoly or any special privilege in their own country or in any other country.

We need not involve ourselves in the muddle of European politics. If by any possibility those who direct the affairs of the several nations should come to a realization of the fact that the re-habilitation of Europe depends upon a basic reorganization of industry in accordance with democratic principles, and if they should be able to come together for the discussion of a plan for common action, this country should not hold itself aloof from their councils. But we can do nothing that will help them or us, so long as all discussions are dictated by political motives, and all politics are directed from under-ground by the powerful finan-

cial groups of the several nations. Our entrance into world councils under such conditions would only add another group of privileged interests to the existing *mêlée,* and make it even less likely that in the near future the nations would be able to order their affairs on a basis of universal justice and mutual advantage.

We are confronted with the problem of adjusting our relations to one another and the relations of all of us to all the world, so that all the rights of all mankind shall be equally protected, and the common welfare of all mankind equally promoted. We have come to the place in the development of our national life where our true self-interest and our national ideals exactly coincide. By holding fast to the principles and by being true to the traditions of American democracy, we shall establish enduring industrial prosperity and secure permanent peace.

To fulfill this destiny we shall have to abandon the method of conflict in the adjustment of our industrial affairs, and substitute for it the method of free coöperation, organized on the basis of the equal rights of all. We already have organizations exactly fitted to carry on the work necessary to the achievement of such reorganization. The rights and the interests of labor can not be protected by any other method. The same is true of the farmers; and these two classes make up the great majority of the people. We have shown that the advancement of farm prices or of wages always results in a still greater advance of consumers' prices; and wage-earners and farmers make up the great body of consumers. The solution of both the workers' and the farmers' problems, therefore, requires the protection of the consumers' as well as the producers' interest in industry. These interests will both be protected, and equally protected by industrial democracy.

The farmers, the workers, independent business, all

primary producers not enjoying the privileges of monopoly, and all unprivileged consumers have a common interest in industrial democracy; and without industrial democracy the monopoly interests themselves are doomed to destruction. We can have industrial democracy whenever we want it. It can be secured by united action, wholly in accordance with the principles upon which our nation is founded, and in agreement with the traditions which all Americans cherish. There will be no revolution; no violence; no appeal to class hatred; no disruption of our national life; no experimenting with untested economic, social or political theories—only constructive coöperative action on the part of all who have faith in our common humanity.

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